



OF THE
Railroads of Connecticut
TO ACCOMPANY THE REPORT OF THE
RAILROAD COMMISSIONERS.
1895

NEW YORK, N.H. & H.R. R.R. SYSTEM
PHIL. READING & N.E. R.R.
N.Y. & NEW ENGLAND R.R.
NEW LONDON NORTHERN R.R.

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42D ANNUAL REPORT

OF THE

RAILROAD COMMISSIONERS

OF THE

STATE OF CONNECTICUT,

TO WHICH ARE ADDED

STATISTICAL TABLES

COMPILED FROM THE

ANNUAL RETURNS OF THE RAILROAD COMPANIES OF THE STATE
FOR THE YEAR ENDING JUNE 30, 1894.

PRINTED BY ORDER OF THE LEGISLATURE

HARTFORD, CONN.:
PRESS OF THE CASE, LOCKWOOD & BRAINARD COMPANY.
1894.

RAILROAD COMMISSIONERS.

GEO. M. WOODRUFF,

WM. O. SEYMOUR,

ALEX. C. ROBERTSON.

State of Connecticut.

REPORT.

His Excellency LUZON B. MORRIS :

The depression in all departments of business which has continued during the year for which this our forty-second annual report is made, and which has caused our municipalities as well as our railroad companies to avoid unnecessary expenditures has been evidenced by less than the average number of demands for the attention and services of the Commissioners. In only two instances have any petitions been received from town or city authorities which might involve any expense to them, and the number of petitions from municipalities asking for action which would require expenditures by the railroad companies have been very few. Most of the hearings held by us have been in connection with the improvements along the line of the New York and the New London divisions of the New York, New Haven & Hartford Railroad. We have also had hearings upon applications for our approval of the crossing of steam railroads at grade by electric roads. More applications of this kind would probably have been received except for the adverse position taken by us in regard to such crossings; we having become satisfied that such crossings ought not to be allowed except under the same regulations for safety as would be required in the case of the grade crossing of one steam road by another. Our position in this matter has been fully set forth in our several findings and in our last annual report, and need not be repeated at length. A brief résumé may, however, be desirable, preceded by a sketch of the legislation leading up to the present condition of our laws on this subject.

In the earliest days of railroad building no attention seems to have been given to the danger of grade crossings, but so early as 1849, in the general act relating to railroad companies, it was provided that every railroad corporation which should thereafter construct a railroad across a highway, should so construct it as to

cross over or under the highway; provided, however, that the Commissioners upon any railroad might after due notice authorize the railroad to be built on a level with the highway crossed.

This legislation was, however, in advance of public sentiment, and for thirty years individuals and municipalities more often urged the construction of level crossings than opposed them, and the restriction was practically a dead letter. In 1883, public sentiment had become so far aroused against the allowance of new grade crossings that the consent of the Commissioners to the construction of such crossings on new railroads was permitted to be given only for special reasons "to be entered in their records," and practically no such crossings have since been allowed. It was not till 1870 that any limitation was placed on the construction of new highways across railroads at grade. By an act passed that year the laying out or constructing of a highway or public street of any kind across a railroad upon a level therewith was prohibited, except under written authority of the Commissioners, which authority was rarely given, and in 1883 the prohibition was made absolute.

There, however, still remained the unrestricted right of street railroad companies to lay their rails at the existing level on any highway crossing a railroad at grade and upon which the street railroad company might be authorized to construct its road. We regarded this right as at variance with the policy of the State as expressed in its legislation restricting and prohibiting the construction of new grade crossings, and providing for the elimination of those already existing, and repeatedly urged upon the legislature such action as would be in line with this policy and prevent the crossing at grade of steam railroads by horse, cable, or electric roads. In 1889 an act was passed which, in terms, if not in intent, prohibited such crossings, and for four years none were allowed. But in 1893 the influence of the electric companies was sufficient to secure a modification of the act of 1889, by which such crossings were permitted upon "approval" by us. For reasons given in our report of last year and in the cases decided by us during that year, we considered this action of the legislature as equivalent to direct instructions that in some cases crossings should be allowed, and in the instances heretofore reported they were permitted, but in the only two applications under the statute brought during the current year, we have declined to give our approval, unless such details of

construction were agreed upon between the electric and steam railroad companies as would render a collision impossible. Of course, such action by us has not been acceptable to the petitioners, and we have reason to believe that the coming General Assembly will be asked to authorize such crossings upon other and less stringent terms. We believe such action ought not to be taken. In our judgment it would be far better to prohibit absolutely the crossing of street and steam railroads at grade, and to provide that in all cases the one should be carried over or under the other, and, should it be thought expedient, provide that not only the municipality but also the State, as well as the two companies, should be included in the apportionment of the expense of the separation of grades. Action of some kind should be taken at the next session of the legislature, as no question more affecting the public safety is likely to be presented. The near future is to see a greatly increased demand for electric roads in our State, and they cannot serve the purposes for which they will be demanded without crossing and recrossing our railroads; and these crossings ought to be permitted, but only upon the same conditions of safety as new highway crossings are permitted—upon separated grades. Upon no other corporations have greater public privileges been conferred than upon these companies for the building of electric roads, and the number wishing incorporation and the rush with which such roads are being constructed, indicate how profitable they are expected to prove. It cannot, therefore, be regarded as unreasonable that they should comply with all requirements of public safety, than which none can be greater than the separation of grades at crossings of steam roads. When this separation is effected by taking the electric road without the highway over or under the steam road the expense should fall on the electric company, as it would fall upon a steam railroad company under like circumstances, but when the highway is also changed, then, following the analogy of our present laws for the elimination of grade crossings of highways and steam railroads, the expense ought to be apportioned as above suggested; but in any event let there be no more crossings at grade.

In the general act passed at the January session, 1893, it was provided in section 14 that:

“All street railway companies or trustees operating street railways within this State, shall, on or before the first day of October, 1894, and annually thereafter, make a return to the railroad commissioners, in such form as said

railroad commissioners shall prescribe, which form shall substantially follow the requirements of section 3586 of the general statutes in so far as they are applicable to the business and affairs of street railways with such additional matter as shall render said returns as complete, as to business, property, and affairs of street railways, as were required from steam railroads under section 3586, which said returns shall be signed and sworn to by the president and treasurer of the company, or by a majority of the trustees making the same. And the railroad commissioners shall, annually, on or before the first day of August, furnish to the officers or trustees of every street railway company, blank forms which shall conform to the requirements of this section."

Section 3586 had been repealed in 1889. We, however, assumed it to be the clear intent of the legislature that we should follow the requirements of that section as it was before its repeal, and therefore prepared and sent out the blanks accordingly; but this section required the returns to be made for the year ending the 30th of September, while the act of 1893 required them to be made to us "on or before the first day of October."

We, of course, had no power to change either the period to be covered by the returns or the date on which they were to be made. We could only say to the companies that they must make them so soon as possible after the first of October, and trust that the State Treasurer would not think it his duty to try to collect the twenty-five dollars a day penalty for not reporting by the first. If the provision requiring these reports to be made to us is to be retained, there should be a change, either in the period to be covered by the reports or in the date at which they are to be returned to us. If it is intended that the period and date should conform to the case of steam railroad companies, the year should terminate with the 30th of June, and the returns be sent in by the 15th of September, and the blanks distributed to the companies by the 1st of June. If the returns are to be of any value a more uniform system of book-keeping will be necessary to enable the companies to comply strictly with the forms. The accounts, as kept by these companies, seem, in some instances, to have been of the most primitive character, and in several of the returns as first made to us, no division of construction or equipment accounts was attempted, and in a still greater number of instances no balance sheets were furnished. But these omissions have since been either corrected or such corrections are promised.

By the act of 1893 above referred to, every street railway

company was empowered to transport both "persons and property," the transportation of the latter to be subject at all times to such regulations as the Superior Court or any judge thereof may from time to time prescribe; but, as appears from the returns of the companies as made to us, only one, to wit, the Fair Haven & Westville Railroad Co., carried any freight during the year.

In three States at least, to wit, Massachusetts, Rhode Island, and Pennsylvania, such companies are by general State laws prohibited from carrying express or freight, while in some other States like prohibitions are inserted in the charters of the companies. In a paper read at the Atlanta Convention of the American Street Railway Association this fall, the author stated, that in order to obtain information on this subject, nine hundred and seventy-eight letters were sent out, and four hundred and thirteen replies received. From those replies it appeared that sixty-two companies were carrying the United States mails, fifty-eight of them under direct contracts with the government, several systems making use of an independent mail car in charge of a regular agent, the same as on steam railroads. Thirty-five companies reported that they were doing an express business, and fifty-five were hauling freight. It would appear, therefore, that as yet comparatively little business other than passenger transportation is being done by the street railway companies, but many, not yet engaged in the transportation of mails, express, or general freight, expressed their intention so to do, and there seems to be no reason to doubt, but that in the near future the electric roads will be doing business of the same general character as that now done on steam railroads, and in the construction of such roads between towns disinterested opinion favors an independent right of way, apart from the highways, to be acquired in a similar manner as the right of way for steam roads.

Our statutes declare that "the phrase 'railroad company' shall be construed to mean and include all corporations, trustees, receivers, or other persons, that lay out, construct, maintain, or operate a railroad operated by steam power, unless such meaning would be repugnant to the context or to the manifest intention of the General Assembly," and Elliott defines a street railway to be "a railway laid down upon roads or streets for the purpose of carrying passengers," and also says that "the distinctive and essential feature of a street railway, considered in relation to other railroads, is that it is a rail-

way for the transportation of passengers, and not of freight." But the logic of events will soon, if it does not already, require new definitions both of the one and the other. "Railroad companies" in many places are making use of electric motors for special services, and "street railways" are transporting freight as well as passengers, and are no longer simply "laid down upon roads or streets," but have locations and rights of way exclusively their own, the same as steam railroads. Another question which, in the near future, will have to be decided by our Supreme Court is one which has already reached the highest court in some of the States, and that is whether the construction of an electric road upon a highway or the conversion of an existing horse railroad into an electric road with the right to carry freight is an additional servitude for which the adjoining proprietors are entitled to compensation. As is well known, a distinction has been made by our own courts in this regard between the construction of a steam railroad and a horse railroad. The law in this State has been, as laid down by Chief Justice Storrs, that the construction of a steam railroad upon a highway was a new servitude upon the estate of the adjoining proprietor, and was an act demanding the compensation which the law awards when land is taken for public purposes. On the other hand, the court, as expressed by Judge Ellsworth, in another case declared that the construction of a horse railroad was neither a new nor additional servitude for which the adjoining proprietor could recover compensation. It would be manifestly improper for us to discuss the question. We may, however, be permitted to express the opinion that the final decision will depend on whether the courts follow and accept the reasoning of Chief Justice Storrs in the one case or of Judge Ellsworth in the other.

The latest case which we have noticed bearing upon these questions is one decided by the Supreme Court of California on the 13th inst., in which the court disregards the distinction and definition laid down by Elliott, as quoted above, and declares that it is at a loss for any good reason for the distinction, or to see why the transportation of freight by modern and improved methods is not equally entitled to encouragement with the transportation of passengers; that the wants of the citizen demand the former equally with the latter, and that such a user imposes no new burden or servitude upon the owner of the abutting land, whose

only ground of recovery would be in case his right of ingress and egress or his right to light and air should be interfered with.

FINANCIAL STATEMENTS.

CAPITAL STOCK AND INDEBTEDNESS.

The outstanding capital stock of our railroad corporations, reported as issued up to June 30th, was \$90,006,840.88, being an increase of \$5,009,700.00, of which \$5,004,900.00 was by the New York, New Haven & Hartford, \$3,600.00 by the Norwich & Worcester, and \$1,200.00 by the Hartford & Connecticut Western. No other companies reported any change. The total indebtedness was increased \$1,991,148.28, the indebtedness of the New York & New England having increased \$1,290,400.70, and that of the New York, New Haven & Hartford \$949,062.91; the Meriden, Waterbury & Connecticut River \$22,500.00; the Norwich & Worcester \$159,576.00; and the Shore Line \$1,000.00, while the Danbury & Norwalk reports a decrease of \$50,000.00, the New Haven & Derby a decrease of \$246,900.88, the Philadelphia, Reading & New England a decrease of \$131,523.90, the New London Northern a decrease of \$563.50, Shepaug \$1,556.02, and the South Manchester \$847.03. The total increase is in current liabilities, the total funded debt having decreased \$175,362.24. The total debt amounted to \$54,253,976.85, of which \$44,414,061.04 was funded and \$9,839,915.81 was current liabilities.

The average amount of stock issued per mile of single track owned, not including sidings, was \$46,632.04. The funded debt, \$23,010.68 per mile of track or \$29,320.28 per mile of road, and the current liabilities, \$5,098.00 per mile of track, or \$6,495.89 per mile of road.

GROSS EARNINGS.

The operations of the "Old Colony System" are for the first time included in the report of the New York, New Haven & Hartford; therefore no comparisons can properly be made of the totals of last year, with those included in this report. The gross earnings amounted to \$32,444,313.38, the New York, New Haven & Hartford being the only company, with its greatly increased mileage, showing any greater amount than the previous year. The passenger earnings were \$15,296,761.14, and the freights \$14,152,365.10,

the remainder of the gross amount being for miscellaneous earnings. It will be noticed that while last year the freight earnings exceeded the passenger by \$1,761,121.72, this year the passenger exceeded the freight by \$1,144,396.04.

OPERATING EXPENSES.

With the increased mileage, the operating expenses amounted to \$23,315,520.56, or 71.86 per cent. of gross earnings, the percentage having increased 1.72 per cent. over the previous year.

NET EARNINGS.

The proportion of operating expenses to gross earnings having increased during the year, the proportionate amount of net earnings was of course less. They amounted in the whole to \$9,128,792.82, which was \$3,907.96 per mile operated, as compared with \$4,585.79 per mile operated the previous year, and forty-four cents and seven mills per mile run, which was eight cents and four mills more.

TAXES.

The taxes paid to the State of Connecticut by the railroad companies amounted to \$733,447.36, the total amount paid in taxes being \$1,733,538.58, which was 19 per cent. of their net income, or 22.4 per cent. of the income after payment of interest and insurance.

DIVIDENDS.

The amount paid in dividends was \$4,572,573.50, the New York, New Haven & Hartford being, as the previous year, the only operating company paying any on its own stock, the amount so paid being \$3,631,292.50. The dividends paid by seven other companies were from rentals received from the New York, New Haven & Hartford, while that of the Norwich & Worcester was from rentals paid by the New York & New England, and that by the New London Northern was from the Central Vermont, and that of the Hartford & Connecticut Western by the Philadelphia, Reading & New England. The three operating companies which paid no dividends were the Philadelphia, Reading & New England, the Shepaug, and the South Manchester.

PASSENGERS AND FREIGHT CARRIED.

The total number of passengers carried was 53,775,945, and the average length of each passenger's ride 15.62 miles, which was 2.31 miles less than the previous year. The large suburban business done on the various divisions of the Old Colony system easily accounts for the lessening of the average trip. The total passenger revenue of \$15,296,761.14 yielded but 28.45 cents per passenger, which was 4.73 cents less than the previous year, a result of the same causes as made the average trips shorter.

The freight carried was not much more than the previous year, notwithstanding the addition of the Old Colony system, amounting to 13,122,650 tons, or 1,000,910 tons more than the previous year. The average haul was 70.18 miles, or 2.50 miles less than the year before, and the revenue of \$14,152,365.10 was one dollar twelve cents and six mills per ton, which was six cents and one mill more than the previous year.

TRAIN MILEAGE.

The total number of miles run by trains of all kinds was 26,671,023, of which passenger trains ran 12,733,679, and freight trains 7,601,451, the mileage of all other trains amounting to 6,335,893 miles. The comparative tables showing the number of passengers and tons of freight carried, with the passenger and freight mileage, and earnings with the several per cents. of increase for ten years are omitted, as no proper comparison can be made for reasons previously given.

PROPERTY ACCOUNT.

The property account of the companies shows an increase of \$9,700,665.16, amounting to \$159,633,825.61, apportioned as follows: Cost of roads, \$123,131,642.61; cost of equipment, \$15,427,566.73; bonds and stocks, \$3,863,201.22; other permanent investments, \$9,243,257.87; cash and current assets, \$5,410,865.86; and other assets, \$3,557,291.32. This makes the average cost of road per mile \$80,653.74, which is \$63,742.01 per mile of single track not including sidings, or \$47,661.71 per mile, sidings included. The cost of equipment averages \$6,604.40 per mile of road operated.

LENGTH OF ROADS.

The main lines and branches in this State were the same on the 30th of June as the year before, amounting to 1,013.22; the length of second tracks was also the same, 233.60 miles; the third and fourth tracks had increased to 14.56 miles each, making 1,275.94 miles of single track. The sidings increased to 372.80 miles, giving 1,648.74 as the total length of tracks in the State. The total length of single track owned by our companies is 1,930.15 miles besides 653.30 miles of sidings, making total single track mileage owned by our companies 2,583.45.

EARNINGS AND EXPENSES PER MILE OPERATED.

The number of miles of railroad operated by our companies, as appears by their last returns, is 2,335.95, being an increase of 621.25 miles, the increase being entirely in the mileage operated by the N. Y., N. H. & H., which has added: Old Colony system 616.04, Providence & Worcester .09, N. Y. & N. E. 4.55, Boston & Maine .57.

The gross earnings per mile were \$13,889.13, a falling off of \$1,470.53 per mile, which was partially offset by a reduction of operating expenses, which averaged \$9,981.17, a loss of \$792.21 per mile; the earnings falling off 9.38 per cent., and the operating expenses being reduced 7.37 per cent. The net earnings amounted to \$3,907.96 per mile operated, a loss of \$677.83 per mile, or 14.39 per cent.

EARNINGS AND EXPENSES PER MILE RUN.

The gross earnings per mile run show an advance over the preceding year, having been one dollar fifty-eight cents and eight mills, an increase of thirty-seven cents a mile, but the operating expenses per mile run were also materially greater on all the roads except the South Manchester, which showed a saving of sixteen cents and four mills per mile. The average increase was twenty-eight cents and six mills per mile run. The net earnings per mile run were, therefore, eight cents and four mills in advance of the previous year, amounting to forty-four cents and seven mills per mile.

MAINTENANCE OF WAY AND STRUCTURES.

The total amount charged for the year to maintenance of way and structures was \$3,981,118.69, being an average of \$1,704.28

per mile of road operated, and \$0.15 per mile run. The detailed statement of these expenditures is given in our remarks on the condition of the several roads.

ACCIDENTS.

Turning from the financial summary of the railroad business for the year ending June 30th to the accident record for the same period, we find an apparent condition of things alike gratifying to managers, travelers, employes, and to all who are interested in humanity. In the first place the number of passengers reported injured was but twelve in all, two receiving fatal injuries through their own carelessness, and of the ten others injured all except two suffered through their own fault.

EMPLOYES.

The most remarkable feature of the record, and one possibly not fully explained, is the relatively small number of employes reported injured compared with previous years. If the reduction had been on any one road alone we should have attributed it to a failure to report the injuries, but it was fairly proportioned among the several, except on the Philadelphia, Reading & New England, where the falling off is extraordinary.

Of the operating companies the Shepaug and the South Manchester report no accidents to employes, while of the other four those reported by the New London Northern were 45 per cent. of the number last year, by the New York & New England, 43 per cent., and by the New York, New Haven & Hartford, 45 per cent.; but on the Philadelphia, Reading & New England, only a little over 7 per cent. It should, however, be stated that the number of employes reported as injured on the Philadelphia, Reading & New England last year was only four less than the number so reported by its predecessor two years ago.

The total number of employes reported as injured was 194 as against 504 the year before, of the injured 23 or 11.85 per cent. were killed or died from their injuries, the percentage of fatal injuries being .72 per cent. less than the previous year. Of the number injured, 122 were classified as trainmen, 15 of them fatally injured, 42 as switchmen, flagmen, watchmen, 2 of them fatally, and 30 other employes of various kinds, 10 of these being fatally injured.

The number of trainmen who received their injuries in coupling or uncoupling engines and cars was 59, of whom 1 was killed; 31 fell from trains, 10 of them being injured fatally; only 4 were injured in collisions, and 4 in derailments; 11 were struck by overhead obstructions, of whom 2 were killed, and 13 other trainmen were injured in various ways. Of the switchmen, flagmen, and watchmen, 30 were injured in coupling, none fatally; 8 fell from trains or engines, 2 being killed; 2 others were struck by overhead obstructions, and 2 others injured by other causes. Of the other employes injured, 2 were hurt in coupling; 3 fell from engines or trains, 2 being killed, and 25 were injured in various other ways, 7 of them receiving fatal injuries. Of the total number injured, nearly 47 per cent. received their injuries in coupling or uncoupling, the per cent. so injured being almost the same as last year, when it was a trifle over 46 per cent.

We believe that an explanation of this gratifying reduction in the number of injuries to employes, and perhaps a sufficient explanation, is found in the fact that not only was the number of trains reduced, but the large falling off in freight traffic rendered it possible to handle the remainder without the exhausting demand on the time and strength of employes which always attends a rush of business.

TRESPASSERS.

Probably because of the larger number of unemployed, increasing the army of tramps, the number of those classed as trespassers who were injured was even more than the previous year, amounting to 175, of whom 74 were either killed or died of their injuries.

NON-TRESPASSERS.

The immunity from accident which was reported as to passengers and employes seems to have included also those persons who are neither classed as the one or the other nor as trespassers; of these only 22 were injured, or 66 per cent. as many as last year, but of the injured 14 were killed or died from their injuries.

HIGHWAY CROSSINGS.

As the most dangerous crossings are eliminated the number of persons killed or injured at crossings of railroads and highways is perceptibly lessened. During the year covered by the returns such

accidents occurred to only 22 persons, as against 31 the previous year and 48 the year before. The proportion killed in these accidents is always large, amounting the past year to 10.

CONDITION OF THE ROADS.

The mileage of the six operating roads doing business within the State is as follows :

The New York, New Haven & Hartford Railroad.

First track,	1,446.95	miles.
Second track,	504.13	"
Third track,	39.29	"
Fourth track,	29.21	"
Trackage rights,	61.12	"
Sidings,	674.17	"
Total, all tracks,	2,754.87	"

The New York & New England Railroad.

First track,	545.19	miles.
Second track,	114.04	"
Trackage rights,	12.46	"
Sidings,	198.89	"
Total, all tracks,	870.58	"

The Philadelphia, Reading & New England Railroad.

First track,	179.75	miles.
Second track,	4.60	"
Trackage rights,	1.25	"
Sidings,	41.80	"
Total, all tracks,	227.49	"

The New London Northern Railroad, operated by the Central Vermont Railroad.

First track,	121.00	miles.
Sidings,	29.95	"
Total, all tracks,	150.95	"

The Shepaug, Litchfield & Northern Railroad.

First track,	38.23	miles.
Sidings,	4.14	"
Total, all tracks,	42.37	"

South Manchester Railroad.

First track,	2.25 miles.
Sidings,	1.72 "
Total, all tracks,	3.97 "
Grand total of all tracks of all roads,	4,050.14 "

The following is the summarized result of the operation of these roads for the year ending June 30, 1894 :

Gross earnings,	\$32,444,813.38
Operating expenses,	23,315,520.56
Net earnings,	9,128,792.82
Expended for maintenance of way and structures,	3,981,118.69
Expended for maintenance of equipment,	2,788,860.71
Expended for new equipment,	445,764.47
Charges to capital accounts for permanent improvements,	4,562,209.42
Number of new ties laid,	1,314,346
Tons of new steel rails laid,	25,533
New passenger cars,	20
New locomotives,	26
New freight cars,	230
Total employees, including officers,	24,474
Total compensation of the same,	\$14,813,257.48
Number employed in maintenance of way and structures,	5,676
Amount paid for their services,	\$2,758,768.32

It will be observed that the operating expenses have been $71\frac{8}{10}$ per cent. of the gross earnings. The amount expended for maintenance of way and structures is 17 per cent. of the total operating expenses and the number of persons employed in this department is 23 per cent. of the total number of employees. The changes which have taken place in the physical condition of the various roads, which have been slight except on the New York and the New London divisions of the N. Y., N. H. & H. Railroad, will be noticed elsewhere under the proper heading.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD.

The progress made in the absorption of the leased lines by the exchange of their stock for the stock of this company is shown by the following statement: It will be remembered that it was stated in our last report that the entire stock of the New York, Providence & Boston Railroad, the Hartford & Connecticut Valley Railroad, and the Stamford & New Canaan Railroad had been exchanged for \$5,900,000.00 of the stock of the N. Y., N. H. & H. Railroad, into

which company they had been merged. Of the leased lines not merged 150,513 shares out of a total of 282,087 shares have been exchanged for 87,679 shares of the N. Y., N. H. & H. company of a par value of \$8,767,900.00, which, added to the stock of the merged lines, makes a total of \$14,667,900.00 of the stock of the lessor company which has been exchanged for its leased lines. The only exchanges which appear to have been made since our last report are 55,180 shares of the Old Colony, 2,976 shares of the Housatonic, 15 shares of the Stockbridge & Pittsfield, and 10 shares of the Berkshire Railroad company.

New York Division.

During the past year the four tracks have been completed and brought into service between New Haven and Bridgeport and the freight and passenger stations at Stratford, Milford, Woodmont, and West Haven have been re-arranged to facilitate the transaction of business at each of those places. It will be remembered that the four tracks between Bridgeport and South Norwalk were previously completed and have been in use for some time past. Between South Norwalk and Greenwich the work of construction is fast approaching completion, and between the "quarry cut-off" in Greenwich and Portchester the tracks are already completed and in use. The most important and expensive portions of the work remaining to be done are those through Bridgeport, South Norwalk, Stamford, and Greenwich. It is needless to repeat here what has heretofore been said concerning the importance and superior character of these improvements. Plans have been approved by us for the four track construction through the city of South Norwalk, involving a four track drawbridge across the Norwalk river and the elimination of all the grade crossings of highways within the limits of the change. The tracks are to be elevated so as to pass over the streets which are to be only slightly depressed to give suitable head room for the highway travel. Although the situation was a complicated one to treat, we are firmly convinced that the plans adopted are the best, both for the city and for the railroad company, which engineering skill could devise. The work of construction is already begun and is to be vigorously prosecuted until completed.

Hartford Division.

The most important and expensive change made on this division since the last report is the elimination of the Water street crossing in the city of New Haven. Owing to its location at the entrance to the Water street freight yard, it was probably crossed and obstructed more frequently by regular and switching trains than any other crossing in the State, which fact rendered its use for highway purposes extremely hazardous. An iron bridge of $157\frac{1}{2}$ feet span has been erected over the tracks for the accommodation of the large highway traffic, with inclined approaches from the adjacent streets, at an approximate cost of \$50,000 for construction alone, not including damages to adjoining property. Additional tracks have been laid between Belle Dock junction and the Air Line junction, which have been so arranged as to accommodate the business of the New London division in addition to that of the Hartford and Air Line divisions between those points. A new iron girder bridge has been erected on the Middletown branch over the Mattabesett river in place of a wooden Howe truss bridge, and a new passenger station building has been erected at Enfield on the easterly side of the tracks.

New London Division.

During the past summer the Fair Haven "cut-off," extending from a point westerly of East Haven station to the Air Line junction with the Hartford division, was finished and opened for service, which completed the double-tracking of this division. It was by far the most expensive portion of the double track construction, but it is a vast improvement over the crooked alignment and steep grades of the old line, obviating the construction of a long, high, and costly bridge over the Quinnipiac river and avoiding fourteen dangerous grade crossings through the thickly-settled portion of Fair Haven. The old 60-lb. steel rails, in all about twenty miles, have been removed during the past year and 78-lb. rails have been substituted therefor. New covered platforms have been erected at the Niantic station, affording accommodations and shelter for a large number of persons. This division, since the completion of the double track, with new steel rails, new structures, improved grades and reduced curvature, together with its block signal safeguards, is one of the best-equipped lines in the State, capable of handling a large amount of traffic safely and expeditiously.

Stonington Division.

All the old steel rails weighing 60 lbs. per yard, consisting of about fifteen miles of single track, have been removed during the last year, substituting for the same new steel rails weighing 78 lbs. per yard. Four new iron girder bridges have been erected in place of the same number of wooden bridges, and the grade of the track in the vicinity of the bridges rebuilt has been raised, extended, and improved. The track of that portion of this division within the State is in excellent condition.

Air Line Division.

The track and bridges of this division have been maintained in their usually good condition during the past year, 350 tons of new steel rails and 22,000 new ties having been laid. Such removals and repairs as were needed have been made upon the bridges, including quite a large amount of new material which has been placed in the Quinpiac trestle, which has been reduced in length about 600 feet by the filling for the new yard at the junction with the Hartford division.

Naugatuck Division.

There are few roads anywhere consisting of such a large per cent. of short, sharp curves, the track of which rides so smoothly as that of this division, showing that superior skill and careful attention have been given to the proper elevation and surfacing of the track and curves. Considerable attention has been given during the past summer to so trim the trees and bushes on the inside of the curves as to make the track ahead more plainly visible to the engineers, thus giving them or any one walking on the track a better opportunity to look out for danger and guard against the same. The track has been improved the past season by laying 400 tons of new steel rails, and the bridges have been maintained in satisfactory condition.

Northampton Division.

The same care and attention to the improvement of the condition of the track of this division noticed heretofore have been continued during the past year. Four hundred tons of new steel rails have been laid in the track between Cheshire and Avon, and

seventy tons of seconds have been placed in the track approaching New Haven. A small but neat new passenger station building has been erected at Weatogue, and the bridge over the Farmington river has been entirely refloored in a most satisfactory manner.

Valley Division.

The piling at Saybrook has been repaired and renewed, and a new iron girder bridge has been substituted for a wooden Howe truss bridge below Arnold's station. The track and bridges have been maintained in good condition.

Berkshire Division.

The track of the main line of the Housatonic division has been improved by laying 700 tons of new steel rails in the same during the past year, and the passenger station building at Canaan has been thoroughly repaired and repainted. Several of the bridges on the New Haven & Derby Railroad have been renewed and put in satisfactory condition, and the general condition of the track of the Botsford branch has been much improved. The completion during the year of the new passenger and freight station buildings at Botsford furnishes facilities superior to any heretofore existing there and has greatly changed and improved the appearance of the locality.

Danbury Division.

The track and bridges of this division have been maintained in good condition, but aside from the ordinary work of maintenance no new work has been undertaken. An important change is contemplated at the junction of this line with the main line of the New York, New Haven & Hartford Railroad in the city of South Norwalk, where the track is to be elevated to pass over the streets of the city above grade, and the freight yard and station is to be removed to the wharf front north of the city, as elsewhere referred to.

SUMMARY OF OPERATIONS OF THE NEW YORK, NEW HAVEN & HARTFORD RAILROAD SYSTEM FOR THE YEAR ENDING JUNE 30, 1894.

The figures which show the results of the operation of this system during the past year furnish no intelligent comparison with the business of preceding years, when the mileage did not include the Old Colony road, which has been absorbed and its business in-

cluded in this report. They will, however, form a basis for future comparisons. The income and expenditures given are for 2,019.58 miles of single tracks, excluding sidings and that which is operated under trackage rights.

The cost of maintenance of way and structures for the past year has been \$3,122,729.22, amounting to \$1,546.22 per mile of single track and constituting 17 per cent. of the total operating expenses. Number of new ties placed in the track, 925,498, being 458 ties per mile, and the number of tons of new steel rails laid has been 23,856. The total number of employes in the service of the company, including officers, is 19,337, to whom the sum of \$11,707,326.93 has been paid as compensation for services rendered. Of this number 4,622, or 24 per cent. of the whole number of employes, have been employed in the maintenance of way and structures, to whom \$2,144,902.34 has been paid for their services. The capital of the company has been increased during the past year \$4,445,113.48 for new construction, real estate, permanent improvements and new equipment, the prominent items of which are \$2,316,603.64 for four tracks and other improvements on the New York division, \$649,837.02 for double track on the New London division, \$641,500.71 for real estate, and \$392,279.09 for new equipment. The sum of \$2,144,902.34 has been paid for the maintenance of equipment. The following new equipment has been purchased: 8 locomotives, 10 sleepers, 6 parlor cars, 2 composite cars, 2 coaches, 70 flat cars, 1 dining car, and one car float. The gross earnings of the company for the year have been \$25,576,884.60 as compared with \$18,113,474.38 for the preceding year; operating expenses, \$17,932,709.48 as against \$12,405,934.27 last year; net earnings, \$7,644,175.12 in comparison with \$5,707,540.11 for the previous year.

NEW YORK & NEW ENGLAND RAILROAD.

More work has been done by the maintenance department of this road during the past year than for several previous years, when only that was done which was absolutely necessary, a policy which necessity only could justify. Three thousand tons of new steel rails, weighing 80 lbs. per yard, have been placed in the track, 1,000 tons in Massachusetts and 2,000 tons in Connecticut, extending from Hawleyville to Sandy Hook and from Pomperaug Valley to Meriden Junction in the city of Waterbury. In addition to this, six

miles of rails have been renewed on the Norwich & Worcester division, and on the Central division five miles have been relaid with second hand 66-lb. steel, together with $6\frac{1}{2}$ miles on the Eastern division, which has also been relaid in the same manner. There has also been a larger renewal of ties than usual, rendered necessary by the rigid economy which had previously prevailed, also by laying so much new track, from which unsound ties are more generally removed than in ordinary repairs. On the Eastern division 110,000 have been placed, on the Western 100,000, on the Norwich & Worcester 28,000, and on the Central 38,000, making a total on these divisions of 276,000 new ties. In the East Hartford yard 8,000 feet of new sidings have been laid, also several new passing sidings have been constructed at various points on the line and others have been extended, while 8 miles of old sidings have been relaid with 66-lb. steel rails. Fourteen new industrial sidings have been put in the past year connecting with various industries established on the line of the road, and in addition to these 4,200 feet of siding have been laid at Jewett City, connecting with the new manufactories of the Aspinook Company. Grading for a double track has been completed between Plainville and Forestville, and a depression in the grade of the road, east of the crossing of the Still River, east of Danbury, has been modified and reduced. Twenty miles of track on the Norwich & Worcester division, forty miles on the Eastern division, and twenty-seven miles on the Western division have been thoroughly reballasted and resurfaced during the past season. New passenger station buildings have been erected at Towantic and Hampton, the former in place of one that was burned. An agreement has been made by this company with the New York, New Haven & Hartford company for the erection of a new union passenger station building, to be located at the junction of the Naugatuck and New England roads in the city of Waterbury, with a general waiting-room 120 feet long, 22 feet wide at each end and 50 feet wide at the center, with covered platforms at each end of the same, to cost approximately about \$25,000.

The gross earnings of the system for the past year have been \$5,393,895.56 compared with \$6,413,061.55 for the previous year; operating expenses \$4,115,011.38, contrasted with \$4,512,288.52 last year; net earnings \$1,278,884.18 as against \$1,900,773.03 for the preceding year. The maintenance of way and structures has cost \$610,860.23, being \$926.62 per mile of single track and con-

stituting $14\frac{8}{10}$ per cent. of the total operating expenses. The number of new ties placed in the track has been 297,485, being 451 ties per mile, and the number of tons of steel rails purchased is reported as 1,114, for the year ending June 30, 1894. The whole number of employes, including officers, is 4,057, to whom the sum of \$2,485,023.40 has been paid for services rendered, of whom 772, or 19 per cent. of the total number, have been employed in the maintenance of way and structures. The amount expended for the maintenance of equipment has been \$482,109.27. Ten new locomotives have been added to the equipment.

PHILADELPHIA, READING & NEW ENGLAND RAILROAD.

Evidently the expenditures for renewals and repairs upon the line of this road have been as large as the limited resources of the company would warrant, during a year of great depression in the business of the company, and they seem to have been wisely and prudently made. It will be observed that, after the necessary operating expenses are deducted from the gross earnings, the balance is exceedingly small. Forty miles of fence have been built, which was absolutely needed to enable adjoining proprietors to safely occupy and use their lands. The roadbed has been quite thoroughly cleared of bushes and refuse material which has been for a long time accumulating, thus improving its general appearance. More ties have been placed in the track than in the previous years, and it has been better surfaced. A new iron girder bridge has been substituted for a wooden bridge at Cottage Grove, and a number of the other bridges have been repaired and strengthened, while similar improvements on others are intended. There is a disposition manifested by the managing officers of the road to extend these improvements as rapidly as the financial condition of the company will permit.

The gross earnings of the company for the year have been \$781,068.71, compared with \$1,023,218.08 for the previous year; operating expenses, \$768,381.14, against \$988,862.44 for last year; net earnings, \$12,687.57, in comparison with \$34,355.64 for the preceding year. The sum of \$144,791.22 has been expended for the maintenance of way and structures, amounting to \$780.12 per mile of single track, and being $18\frac{4}{5}$ per cent. of the total operating expenses. The number of new ties placed in the track has been 39,246, being 211 new ties per mile. The number of persons em-

ployed by the company has been 541, of which number 135, or 25 per cent., have been employed in the maintenance of way and structures. The sum of \$119,649.01 has been expended in the maintenance of equipment, and \$53,485.38 has been expended for new equipment, consisting of 10 locomotives and 100 freight cars.

NEW LONDON NORTHERN RAILROAD.

Operated by the Central Vermont Railroad Company.

The track and bridges of this line have been maintained in a satisfactory condition, some new steel rails, frogs, and switches having been provided for that portion of the track extending from New London northerly to the first pile bridge. It is hoped that new steel rails may soon be extended to the city of Norwich. Several new iron bridges have been erected during the past summer, and a number of the pile bridges have been renewed and repaired in a very substantial manner. A new station building has been erected in place of one which was burned at Tolland. The gross earnings for the year have been \$604,344.84, against \$698,055.32 for the preceding year; operating expenses, \$412,681.62, compared with \$482,854.41 for the former year; net earnings, \$191,663.22, in comparison with \$215,200.91 for the previous year. The amount expended for the maintenance of way and structures has been \$57,899.08, amounting to \$478.43 per mile, and being 14 per cent. of the operating expenses of the year. Number of new ties placed in the track has been 37,000, being 305 ties per mile of road. New steel rails laid, 94 tons. Total number of employes, 452, of whom 106, or 24 per cent., have been employed in maintenance of way and structures. The sum of \$36,610.92 has been expended for the maintenance of equipment.

SHEPAUG, LITCHFIELD & NORTHERN RAILROAD.

The track of this road is now composed entirely of steel, and the improvements recently made in the bridges of the line, referred to in the previous report, places the property in better condition than ever before. Many of the bridges have been refloored this season, and the track is in better line and surface and shows evidences of better care and attention than formerly.

Gross earnings for the year, \$73,226.24, last year, \$69,474.16; operating expenses, \$72,263.25, against \$66,135.29 the previous

year; net earnings, \$962.99, compared with \$3,338.87 for the preceding year. The sum expended for maintenance of way and structures has been \$41,014.68, being \$1,072.84 per mile of road operated and constituting 56 per cent. of the total operating expenses. The number of new ties laid has been 14,570, being 381 ties per mile. Number of tons of new steel rails, 468. Number of employes, 73, of whom 37, or 50 per cent., are employed in the maintenance of way and structures. The cost of maintenance of equipment has been \$4,726.90.

SOUTH MANCHESTER RAILROAD.

The track, bridges, buildings, and equipment of this short road are in excellent condition. In order to diminish the liability to obstruction from snow drifts, and at the same time to improve the grade of the road, the excavations are being widened to the full width of the roadbed exclusive of the slopes, and the material derived therefrom is used in raising the depressions in grade wherever they exist. The gross earnings for the year have been \$14,893.43; operating expenses, \$14,473.69; net earnings, \$419.74. Amount expended for maintenance of way and structures, \$3,824.26, being \$1,699.67 per mile and constituting 26 per cent. of the total operating expenses. Number of employes, 14, of whom 4 are employed in the maintenance of way and structures. Amount expended for the maintenance of equipment, \$862.27.

RIDGEFIELD & NEW YORK RAILROAD.

As far as we are informed there is no prospect of the early construction of this road.

DANBURY & STATE LINE RAILROAD.

This line exists only as an organization, and no progress has been made in its construction.

PROCEEDINGS OF THE BOARD.

ELIMINATION OF GRADE CROSSINGS.

The number of grade crossings of railroads and highways were reduced twenty-seven during the year ending June 30th, all but

one in connection with the improvements along the line of the New York, New Haven & Hartford railroad. None have been eliminated on the New York & New England system, and but one on the Philadelphia, Reading & New England, by an arrangement between it and the town of Winchester. Under the act of 1889 there should have been four removed on the former and one on the latter each year, making up to the 1st of last August twenty which should have been changed on the New England, and five on the old Hartford & Connecticut Western; but the former has changed only six, and only two have been changed on the latter. The failure of the companies operating these roads to comply with the statute would have made it our duty to order such number eliminated, except that both companies being in the hands of receivers, "the financial condition" of the companies would not, in our opinion, warrant such orders.

West Haven.

The applications in regard to Washington avenue and Union street in West Haven brought in July, 1893, which were still pending at our last report, called for a number of hearings, and were not decided till the first of February last, when orders were passed directing Washington avenue to be carried under the railroad and Union street to be closed at the crossing and connecting it with Washington avenue by new streets to be opened by the railroad company on each side of its tracks. This change of Union street, though not satisfactory to all, was so far acquiesced in that no appeal was taken, and the changes have been made.

West Norfolk.

The selectmen of Norfolk brought their petition under date of March 13, 1894, asking us to make the necessary orders to secure the separation of grades at the crossing of the Philadelphia, Reading & New England railroad at West Norfolk station, and a hearing was had upon the petition, at which the counsel for the receiver denied the jurisdiction of the Commissioners over the appointee of the court, and as a result the selectmen after consideration withdrew their petition, preferring to wait till such time as that company or some other might be in charge of the property, free from the question involved in the receivership.

Hampton.

The selectmen of Hampton brought a petition under date of November 8th, in the alternative, asking for the bridging of the street at the crossing of the main line of the New York & New England railroad near Chaplin station, or for gates at the crossing. We examined the crossing on the 20th of November, and heard the parties, and subsequently, upon the request of all parties appearing, we ordered the erection and maintenance of electric signal bells at the crossing. These were the only two petitions by municipal authorities which were brought during the year in regard to the elimination of grade-crossings.

Greenwich.

On the 31st of March an order was passed by us approving of a change in the location of a portion of the New York division of the New York, New Haven & Hartford Railroad in the town of Greenwich, the tracks being carried over the three highways crossed.

South Norwalk.

The New York, New Haven & Hartford Railroad Company, in pursuance of its policy of four-tracking its New York division and the elimination of all grade crossings thereon, brought its five petitions to us, under date of November 7th, asking for orders for the elimination of the Washington and Main, and Monroe street crossings on its main line, the Mechanics street crossing on the Wilson's Point Branch, and the Marshall and Ann street crossings on the Danbury division. These petitions were heard by us on the 22d and 30th of November, and a thorough examination of the location and plans made; and subsequently orders were issued providing for the carrying of all of these streets under the railroad tracks in accordance with plans submitted.

BRISTOL.

The only instance in which the Commissioners have attempted to carry out the provisions of the act of 1889, authorizing us to institute proceedings, on our own motion, to compel a railroad company to eliminate a grade crossing of a highway, was in regard to Main Street in Bristol, in which the order was made March 2,

1891, and from which the New York & New England Railroad Company appealed.

The various successive stages of that appeal, in all of which the action of the Commissioners was sustained, have been given in our last three annual reports, bringing the case up to the United States Supreme Court, and in our last report we gave the briefs as filed before that court by the counsel on both sides. The case was submitted on the 8th of January and decided on the 5th of February last, the opinion of the court being given by Chief Justice Fuller, affirming the judgment of our own Supreme Court as given by Chief Justice Andrews, thereby settling alike the constitutionality of the act and the legality of the proceedings under it. The court held that it had jurisdiction over the decision of our own court that the statute was constitutional; that the act, being directed to the extinction of grade crossings as a menace to public safety, was a proper exercise of the police powers of the State; that a power reserved by a statute of a State to its legislature to alter, amend, or repeal a charter of a railroad corporation authorizes the legislature to make any alterations or amendments of a charter granted subject to that power which will not defeat or substantially impair the object of the grant, or any rights vested under it; that railroads are subject to such legislative control as may be necessary to protect the public against danger, injustice, or oppression; and that this control may be exercised through a board of commissioners; that there is no unjust discrimination, and no denial of the equal protection of the laws in regulations regarding railroads, which are applicable to all railroads alike; and that the imposition upon a railroad corporation of the entire expense of a change of grade at a highway crossing does not thereby deprive it of property without due process of law, if the statute requiring it provides for an ascertainment of the result in a mode suited to the nature of the case, and not merely arbitrary and capricious; and that the adjudication of the highest court of a State, that, in such particulars, a law enacted in the exercise of the police power of the State is valid, will not be reversed by the United States Supreme Court on the ground of an infraction of the Constitution of the United States. So many principles are settled by the decision in this case that none more important affecting the legislation both of this State and in others for the abolishing of grade crossings can easily be found, and we give the

whole statement of the case and opinion of the court in the appendix, pages 38-49.

CROSSING OF STEAM AND ELECTRIC ROADS.

WALLINGFORD.

At the date of our last report there was pending the application of the Meriden Horse Railroad Company, equipped as an electric road, to cross at grade the double tracks of the Hartford division of the New York, New Haven & Hartford Railroad at Wallingford, the Horse Railroad Company having been authorized to extend its road to Center Street in the last named place. The objections to such crossing became so evident that the application has not been pressed to a conclusion, the Horse Railroad Company in the mean time trying to effect, by agreement between it, the Borough of Wallingford, and the New York, New Haven & Hartford Railroad Company, a plan for the separation of grades.

EAST HARTFORD.

The Hartford Street Railway Company presented to us its application, dated May 7, 1894, asking our approval to its crossing at grade the tracks of the New York & England Railroad Company on Main Street in East Hartford. The petition was supported by the apparently unanimous sentiment of East Hartford and the surrounding community, but it seemed to us that the crossing at grade of the three tracks at this place was too dangerous to be permitted. It is, however, a peculiarity of the act of 1893, in regard to such crossing, as fully set forth in our last report, that the Commissioners can impose no conditions or restrictions upon their approval, but must either give an absolute approval or disapproval. We could, therefore only say that we should be obliged to refuse our permission unless an agreement for derailing switches with interlocking signals was executed by the two companies and filed with us. No such agreement has as yet been effected, and the petition is still pending.

FORESTVILLE.

A like petition was brought by the Bristol & Plainville Tramway Company for leave to cross at grade the New York & New England road at Plainville. We took the same course in this case as in the East Hartford matter, and with the same result.

BRIDGEPORT.

The Bridgeport Traction Company was peculiarly fortunate in securing apparently whatever legislation it wanted at the last session of the General Assembly. The Legislature gave it the "right to cross the tracks of any steam railroad at grade under such regulations and restrictions as the railroad commissioners of this State shall establish for the safety of the public." Under this authority it brought its five several petitions dated the 26th of June, 1894, asking us to establish such regulations as to its crossing of the New York, New Haven & Hartford Railroad at Main Street, at East Main Street, at Fairfield Avenue (west end), at East Washington Street, and at North Avenue. In our opinion we had no jurisdiction either to approve or disapprove of the several crossings but only to prescribe regulations in regard to the same, and, therefore, required in each case that the traction company should so lay its rails as in no way to interfere with the rails of the steam railroad, that it should carry its trolley wires at a height of not less than twenty-two feet above said rails, so that brakemen on the cars might not come in contact with them; that it should equip its cars with red signal flags to be used by day and red signal lanterns to be used by night, that it should cause all its cars to come to a full stop before crossing said tracks, and cause its conductors to go upon the crossing with the flag by day or the lantern at night, and if no engine or train is in sight and approaching, signal the street car to cross, the conductor to remain on the crossing till the street car has passed and signal any approaching engine or train which may come in sight after he has so signaled the street car; and if at any time a street car shall for any cause be stopped within the right of way of the steam railroad at such crossing the conductor to send flagmen in each direction for a distance of not less than three hundred feet, with the flag by day or the lantern at night, to warn engineers on the steam road of the obstruction of the railroad by such street car.

The question whether, under our statutes, the change of motive power from horses to electricity on a street railroad now crossing a steam railroad at grade, constitutes a new construction of "a horse, electric, or cable road" across such steam railroad will also probably reach a determination by the Supreme Court in the case of the temporary injunction recently issued restraining the Danbury & Bethel Horse Railway Company from making such change at the crossing in Bethel.

In the matter of the petition of the Fair Haven & Westville Railroad Company for leave to lay a second track across the Belle Dock Branch of the New York, New Haven & Hartford Railroad at New Haven, decided by us last year, we expressed the opinion that such change of motive power did not constitute such new construction.

FAIRFIELD AVENUE CROSSING.

It will be remembered that the Bridgeport Traction Company brought its application to us claiming the right to cross the tracks of the New York, New Haven & Hartford Railroad Company on Fairfield Avenue just below the station at Bridgeport, subject to such regulations as we might prescribe, and that we made a finding on the 3d of November, 1893, expressing the opinion that the General Assembly had granted the right so to cross, and that we had no jurisdiction either to approve or disapprove of its crossing, but only to prescribe regulations in accordance with the terms of the resolution giving the right to cross, and, therefore, making such regulations as we thought required. The railroad company, however, obtained an injunction against the construction of the crossing, which injunction was made permanent on the 18th of last October. From this judgment the Traction Company took an appeal to the Supreme Court of Errors, which was heard by that court on the 28th of November. The briefs of counsel fill nearly ninety printed pages, and though of interest in all points raised, are too voluminous to be reproduced in this report.

The only question involved which affects the action of the Commissioners was whether they were right in their opinion that they had no jurisdiction either to approve or disapprove of the crossing. It was their opinion that the resolution professing to give the right to cross under such regulations as we should impose, having been passed by the General Assembly after the general law which required for such crossings applications to and approval by the Commissioners, was intended to supersede the general provision, and to confer directly by action of the Legislature the right which under the general law could only be acquired with our approval. We were confirmed in this view by the fact that the Legislature, in a large number of cases, after the passage of the general law,

granted in specific terms to street railroads the right to cross steam roads on certain terms and conditions, sometimes to be named by the Commissioners and sometimes incorporated in the resolution itself. We believed, and still believe, that this action was secured through the General Assembly because of the well-known aversion of the Commissioners to granting such crossings, and it was thought to be more certain to secure the sanction of the General Assembly thereto than it would be to obtain the approval of the Commissioners. The counsel for the New York, New Haven & Hartford railroad company, however, contend in this Fairfield Avenue case, that the general law speaks from the day it takes effect and not the day on which it is approved, and that as the general law did not take effect till thirty days after June 30th it repealed the resolution approved on the 28th of June, so far as it was inconsistent therewith. We suppose the decision by the Supreme Court will not be given for some weeks. Whatever may be the final determination of the legal question, we are satisfied that it was our duty to be governed by the apparent intent of the Legislature to authorize such crossing without requiring our approval.

GATES, FLAGMEN, SIGNALS, AND WHISTLING AT CROSSINGS.

Very few applications for additional protection at grade crossings have been received during the year.

Winsted.

The Selectmen of Winchester, under date of February 19th, requested us to order gates or flagmen at the Bridge and Prospect street crossing of the Philadelphia, Reading & New England railroad and of the Naugatuck division of the New York, New Haven & Hartford railroad in Winsted, and after a hearing had and an examination of the premises we passed an order requiring the crossing to be protected by flagmen, which order was complied with.

Plainville.

Upon the petition of the Selectmen of Plainville, which was pending a year ago, we ordered, on the 27th of February, the New York, New Haven & Hartford Railroad Company to erect and maintain gates on each side of its tracks at the Main street crossing of its Northampton division.

New Britain.

On the 3d of October the Selectmen of New Britain brought their petition, representing that public safety required that a gate should be erected or flagman stationed at the crossing of the Hartford division of the New York, New Haven & Hartford railroad next above Berlin station, known as "Kelsey crossing," and asking us so to order. The petition was duly heard and the crossing very carefully examined. The view up and down the tracks from the crossing and its approaches is unusually free from obstructions, so that it would seem that no one who exercised proper care ought to be injured at the crossing, but the evidence showed that the number of accidents had been above the average, greater risks apparently being taken at this crossing than at those where the view is more obstructed. We, therefore, judged that a warning which would notify travelers when it would be dangerous to attempt to cross, was what was needed and all that public safety required, and accordingly ordered electric signal bells to be erected, which would begin to sound when the approaching engine was not less than a quarter of a mile distant, and continue to sound till the highway was crossed.

West Thompson.

Under the act of 1882, providing that the Commissioners, upon complaint of the selectmen of any town, might require the engine whistle to be sounded for highway crossings not at grade, the Selectmen of Thompson filed their complaint, asking that we require the whistle to be sounded whenever trains on the main line of the New York & New England railroad passed over the highway leading from Thompson to West Thompson. Pursuant to appointment, we met the parties at the crossing on the 14th of November, and, after an examination of the location and hearing the evidence, it was agreed by all interested that the best protection to the public would be an electric bell to give warning of the approach of west-bound engines and trains; but as the statute did not give us power so to direct, the railroad authorities agreed to put up the bell without any formal order.

Norwich.

Under date of December 1st the Mayor and City Council of Norwich brought two petitions, the one asking that the sounding of

the locomotive whistle on the New London Northern railroad be dispensed with within the city limits, and the other asking for a like order in regard to whistling on the Norwich & Worcester division of the New York & New England railroad. These petitions were heard on the 21st and granted, so far as authorized by statute.

Plainville.

The Selectmen of Plainville, under the date of June 21st, brought their petition representing that there was prolonged and unnecessary whistling, particularly at night, on both the New York, New Haven & Hartford and the New York & New England railroads, to the great annoyance and disturbance of the citizens, and that the interests of the public require that the whistling be regulated or dispensed with. We met the parties at Plainville on the 6th of July, and after hearing and examination made such orders and recommendations as the law permitted and public safety in our judgment required, and so far as we know the trouble has since been greatly abated. This was the only petition of the kind presented during the year.

SIDE OR SPUR TRACKS.

We have received during the year five applications by selectmen for orders in regard to the laying of spur or side tracks of railroads which would cross highways.

Monroe.

The first was by the Selectmen of Monroe, asking that permission be granted for the laying of two spur tracks to connect the smelting works of the Fairfield Copper Company with the Berkshire division of New York, New Haven & Hartford railroad crossing the highway near Monroe station.

Durham.

The second was by the Selectmen of Durham, for a spur track across the County road, so called, to connect the Air Line division of the New York, New Haven & Hartford railroad with a quarry situated about three-fourths of a mile southerly from the railroad.

South Norwalk.

The third was by the Selectmen of Norwalk, for a spur track across the highway from South Norwalk to Wilson's Point, to con-

nect the Wilson's Point extension of the Danbury & Berkshire division of the New York, New Haven & Hartford railroad with the works of the Standard Oil Company. The construction of the spur track at South Norwalk also involved a crossing of the tracks of the Norwalk Tramway Company, and was opposed by it, developing a view of such crossings on the part of an electric railroad company entirely at variance with the views expressed by the representatives of such companies when asking to cross the tracks of steam railroad companies. Were the danger of allowing the crossing of an electric road by a spur track of a steam road with the infrequent use incident thereto anything like that claimed in this case, no sane man would be found who would advocate the construction of an electric road at grade over the main tracks of a steam road; but we were of opinion that the danger in the case of the spur tracks was greatly exaggerated, and the crossing was allowed on terms practically agreed upon between the two railroad companies.

A question not raised before us, but one affecting our jurisdiction in the case, is whether the laying of a side or spur track across an electric road is the construction of a steam railroad across such electric road, requiring an application to and an approval by the Railroad Commissioners. It will be remembered that the law governing the construction at grade of "side tracks" across highways and the construction of "railroads" is entirely different, the one being permitted upon application of selectmen and the other forbidden except for special reasons, entered upon the records of the Commissioners.

Branford.

The fourth was by the selectmen of Branford for a spur track from the New London division of the same railroad to the quarries of the Red Granite Quarry Co., at Stony Creek. So far as the crossing of highways was concerned all these applications were of the same character and involved like questions, and were granted in practically the same terms, to wit, the details of construction to be as should be agreed upon between the several selectmen and the railroad company, or on their failure to agree, as might be ordered by us, the speed of all engines, trains, or cars while crossing the highways not to exceed six miles an hour, and a flagman to be stationed at the crossing whenever it was to be so crossed.

New Milford.

The last was by the selectmen of New Milford for a spur track from the Berkshire Division of the N. Y., N. H. & H. R. R. to the lime kilns of C. E. Griffing. This has not yet been heard.

TAKING OF ADDITIONAL LANDS.

Of course the changes of line, widening and extending depot grounds, slopes, embankments, and extending the lines of sight involved in the improvements along the New York, New Haven & Hartford railroad has required the acquisition of additional real estate. The larger part of this has been by purchase, but in a number of cases condemnation proceedings have been thought necessary, with the preliminary hearings before us. No new questions have arisen in the cases, so that no detailed report is required or would be interesting.

WATERBURY UNION DEPOT.

The matter of a Union Depot at Waterbury, with incidental elimination of all grade crossings of streets and separation of grades of the Naugatuck Division of the New York, New Haven & Hartford Railroad, and the New York & New England Railroad, which has occupied the attention of that community, of the railroad commissioners, and railroad companies since 1889, and the surveys and plans for which have taken months of labor and cost considerable money, seems to have come to a conclusion hardly commensurate with the elaborate plans originally proposed. The various steps taken in the matter, except the last, have from year to year been reported by us, and are familiar to those interested. At a hearing had on the 11th of September, none of the parties appearing favored the issuing of any order under the original petition of the Common Council asking us to require the railroad companies to lay their tracks side by side and carry them through the city above or below the grade of the several streets. The petition was accordingly dismissed.

This action did not affect the requirements that the railroad companies should construct a Union Station, and inasmuch as the commissioners were to determine the site, style, plans, etc., of such depot in case the companies should not agree, the companies were given to the 13th of November in which to effect such agreement.

On that day they reported an agreement, and exhibited plans for a Union Station to be erected at the grade crossing of the two roads. The plans call for a wooden structure, estimated to cost \$25,000. The companies having agreed, the matter has passed out of the jurisdiction of the commissioners, unless, possibly, a disagreement should arise between the two companies as to their respective rights and obligations in the use of the station, or as to the apportionment of the expense. Upon which points they are to report to us on the second of January, 1895.

GEO. M. WOODRUFF,	}	<i>Railroad Commissioners.</i>
WM. O. SEYMOUR,		
ALEX. C. ROBERTSON,		

HARTFORD, Dec. 24, 1894.

APPENDIX.

NEW YORK & NEW ENGLAND R. R. CO., <i>vs.</i> BRISTOL.	} ERROR TO THE SUPREME COURT OF ERRORS OF THE STATE OF CONNECTICUT.
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(No. 917. Submitted January 8, 1894.—Decided Feb. 5, 1894.)

This court has jurisdiction over a decision of a state court that a statute of the State, compelling the removal of grade crossings on a railroad is constitutional, and a judgment in accordance therewith enforcing the provisions of the statute.

The act of the legislature of the State of Connecticut relating to railway grade-crossings (Act of June 19, 1889, chapter 220, laws 1889, p. 134), being directed to the extinction of grade-crossings as a menace to public safety, is a proper exercise of the police power of the State.

A power reserved by a statute of a State to its legislature, to alter, amend, or repeal a charter of a railroad corporation, authorizes the legislature to make any alteration or amendment of a charter granted subject to that power, which will not defeat or substantially impair the object of the grant or any rights vested under it.

Railroad corporations are subject to such legislative control as may be necessary to protect the public against danger, injustice, or oppression; and this control may be exercised through a board of commissioners.

There is no unjust discrimination, and no denial of the equal protection of the laws, in regulations regarding railroads, which are applicable to all railroads alike.

The imposition upon a railroad corporation of the entire expense of a change of grade at a highway crossing does no violation to the Constitution of the United States, if the statute imposing it provides for an ascertainment of the result in a mode suited to the nature of the case.

By section one of the act of the legislature of Connecticut of June 19, 1889, chapter 220, entitled "An act relating to Grade-Crossings," (Public Laws Conn., 1889, p. 134), it was provided:

"The selectmen of any town, the mayor and common council of any city, the warden and burgesses of any borough within which a high-

way crosses or is crossed by a railroad, or the directors of any railroad company whose road crosses or is crossed by a highway, may bring their petition in writing to the Railroad Commissioners, therein alleging that public safety requires an alteration in such crossing, its approaches, the method of crossing, the location of the highway or crossing, the closing of a highway crossing and the substitution of another therefor, not at grade, or the removal of obstructions to the sight of such crossing, and praying that the same may be ordered; whereupon the Railroad Commissioners shall appoint a time and place for hearing the petition, and shall give such notice thereof as they judge reasonable to said petitioner, the railroad company, the municipalities in which such crossing is situated, and to the owners of the land adjoining such crossing and adjoining that part of the highway to be changed in grade; and after such notice and hearing, said Commissioners shall determine what alterations, changes, or removals, if any, shall be made and by whom done; and if the aforesaid petition is brought by the directors of any railroad company, or in behalf of any railroad company, they shall order the expense of such alterations or removals, including the damages to any person whose land is taken, and the special damages which the owner of any land adjoining the public highway shall sustain by reason of any change in the grade of such highway, in consequence of any change, alteration, or removal ordered under the authority of this act, to be paid by the railroad company owning or operating the railroad in whose behalf the petition is brought; and in case said petition is brought by the selectmen of any town, the mayor and common council of any city, or the warden and burgesses of any borough, they may, if the highway affected by said determination was in existence when the railroad was constructed over it at grade, or if the layout of the highway was changed for the benefit of the railroad after the layout of the railroad, order an amount not exceeding one-quarter of the whole expense of such alteration, change, or removal, including the damages, as aforesaid, to be paid by the town, city, or borough, in whose behalf the petition is brought, and the remainder of the expense shall be paid by the railroad company owning or operating the road which crosses such public highway; if, however, the highway affected by such order, last mentioned, has been constructed since the railroad which it crosses at grade, the Railroad Commissioners may order an amount not exceeding one-half of the whole expense of such alteration, change, or removal, including the damages, as aforesaid, to be paid by the town, city, or borough in whose behalf the application is brought, and the remainder of the expense shall be paid by the railroad company owning or operating the road which crosses such public highway. The directors of every railroad company which operates a railroad in this State shall remove or apply for the removal of at

least one grade crossing each year for every sixty miles of road operated by it in this State, which crossings, so to be removed, shall be those which in the opinion of said directors are among the most dangerous ones upon the lines operated by it, and if the directors of any railroad company fail so to do, the Railroad Commissioners shall, if in their opinion the financial condition of the company will warrant, order such crossing or crossings removed as in their opinion the said directors should have applied for the removal of under the above provisions, and the Railroad Commissioners in so doing shall proceed in all respects as to method of procedure and assessment of expense as if the said directors had voluntarily applied therefor."

Section 2 related to alterations of highways, one-fourth of the expense of which was to be paid by the State. Appeal from any decision of the commissioners under the act was specifically provided for.

On September 2, 1890, the Railroad Commissioners of the State of Connecticut made an order reciting that whereas the directors of the New York & New England Railroad Company had failed to remove or apply for the removal during the year ending August 1, 1890, of any grade-crossing of a highway which crossed or was crossed by their railroad; and whereas in their opinion said directors should have applied for the removal of the grade crossing of their road and the highway known as Main street in the town of Bristol; and directing a hearing upon the matter, with notice to the railroad company, the town, and the owners of land adjoining that portion of the highway. The hearing was had on several days, from September 24, 1890, to February 11, 1891, and the Commissioners, being of opinion that the financial condition of the company warranted the order, and that public safety required it, ordered the crossing removed, and determined and directed the alterations, changes, and removals to be made and done, and that they be executed by the railroad company at its sole expense, including damages occasioned thereby. The company appealed from this order to the Supreme Court of the county of Hartford, the petition for appeal setting forth various grounds therefor, which by voluntary amendment and by direction of the court were reduced to these :

"1. On the second day of March, 1891, the Railroad Commissioners of this State made an order to said company, requiring the removal of the grade-crossing of its railroad and Main Street in the town of Bristol, a full copy of which, marked Exhibit "A," is to be annexed hereto and filed herewith.

"1a. Said company is not, and at the date of said order was not of sufficient ability to execute the work of making the changes required by said order, and its financial condition does not, and did not then warrant the making of such an order.

"11. Said company cannot meet the expenses of executing the said order of the Railroad Commissioners, and have enough income left to pay its fixed charges, including interest on its bonds issued as aforesaid and outstanding, and the dividends on its preferred stock issued as aforesaid, and maintain its railroad in good and proper condition.

"12. If the law under which the proceedings were had, as set forth in said order, justifies said order, then it and said law are void as violating both the Constitution of the United States and the Constitution of the State of Connecticut, in that said order impairs the obligation of the contracts made by said company with the holders of its bonds and preferred stock by making it impossible for said company to pay the interest on their bonds and dividends on their preferred stock as agreed between them and said company, and yet maintain and operate its railroad efficiently, and further, in that it takes the property of said company without just compensation and without due process of law, and denies to it the equal protection of the laws.

"16. Said order, herein appealed from, was not an order necessary for the safety of the public.

"17. Said order should have been so made, and proceedings leading up thereto had, if at all, under section 2 of the act of 1889, as that one-quarter of the expense of its execution should be paid by the State."

Paragraph 1a, was substituted for paragraphs 2 to 10 inclusive, struck out by the court as mere statements of evidence.

The court, upon hearing the parties, the evidence not being preserved in the record, but appearing that evidence was adduced by the company as to its earnings, expenses, and property, made findings of fact that the railroad company was of sufficient ability to execute, and that the financial condition of the company warranted, the order of the Commissioners for the removal of the grade-crossing in question; that the crossing was among the most dangerous upon the line of the railroad, and that the safety of the public required its removal; and affirmed the order appealed from. Thereupon the company prosecuted an appeal to the Supreme Court of Errors of Connecticut, and assigned various errors to the rulings of the Superior Court in amendment of the petition on appeal, and in the exclusion and admission of evidence; and afterwards amended its reasons for appeal by adding the following:

"8. Because the court erred in holding that the statute under which said proceedings were had, as set forth in said order of the Railroad Commissioners, justified said order, instead of holding that it was no law, because contrary to the constitution of this State, in that it takes the property of the plaintiff without just compensation and without due process of law.

"9. Because the court erred in holding that the statute under which said proceedings were had, as set forth in said order of the Railroad Commissioners, justified said order, in therefore affirming said order and overruling the plaintiff's claim that said statute was void as violating the Constitution of the United States, in that it impaired the obligation of the contracts made by said company with the holders of its bonds and preferred stock, by making it impossible for said company to pay the interest on its bonds and dividends on its preferred stock, as agreed between them and said company, and yet maintain and operate its railroad efficiently, and further, in that it took the property of said company without due process of law, and denied to it the equal protection of the law.

"10. Because the court erred in overruling the claim of the plaintiff in the twelfth paragraph of its petition of appeal, that said statute was void, and was no justification of said order, under the Constitution of the United States and the fourteenth amendment thereof.

"11. Because the judgment does not meet the issues. There is no general finding of the issues against the plaintiff, and no finding as to issues raised in paragraphs 11 and 17."

The Supreme Court of Errors of Connecticut decided that there was no error in the judgment appealed from (62 Connecticut, 527), and thereupon a writ of error was allowed to this court, and errors assigned as follows:

"1. The said court erred in holding that the statute under which were had the proceedings as set forth in the order of the railroad commissioners exemplified in the record of the case justified said order, and in affirming the judgment of the Superior Court in and for Hartford county affirming said order, and in overruling plaintiff's claim that said statute was void as violating the Constitution of the United States in that it impaired the obligation of the contracts made by said company with the holders of its bonds and preferred stock by making it impossible for said company to pay the interest on its bonds and dividends on its preferred stock as agreed between them and said company, and yet maintain and operate its railroad efficiently; and further, in that it took the property of the company without due process of law, and denied to it the equal protection of the law.

"2. That said court erred in overruling the claim of the plaintiff in error in the twelfth paragraph of its petition of appeal from the Railroad Commissioners to the Supreme Court as set forth in the record, that said statute was void, and was no justification of said order under the Constitution of the United States and the fourteenth amendment thereof."

ARGUMENT AGAINST THE MOTIONS.

Mr. Henry C. Robinson and Mr. John J. Jennings for the motions to dismiss or to affirm.

Mr. Charles E. Perkins and Mr. Edward D. Robbins opposing.

It is conceded that in Connecticut the existing grades of both the railroads and the highways crossing them were legally established. When plaintiff's railroad was built through the town of Bristol many years ago, the legislature had enacted a special law giving to plaintiff's predecessor the right to cross highways, but at the same time giving to all persons sustaining damage from interference by the railroad company with a highway the same rights as to a judicial assessment of damages which were given to persons whose land was taken. By a subsequent act of the legislature it was provided that "the locations of the several railroad corporations in this State, of which the New York & New England Railroad Company has become and is a successor, and the construction of said road by and upon its center line, and as adopted and in use by it, are hereby ratified, confirmed, and approved, and the same shall stand good and be for the use and benefit of the said New York & New England Railroad Company."

That was the condition of the rights of the plaintiff in error when the act of 1889 was passed.

I. The plaintiff in error contends that that act denies it the equal protection of the laws, to which it is entitled under the Constitution of the United States.

If the Railroad Commissioners and the Superior Court, after a fair hearing of both the plaintiff railroad company and the defendant town, had ascertained the degree of responsibility of each of the parties and had judicially assessed upon each a corresponding share of the expense, the case then presented would differ widely from that at bar. But, although it is admitted that justice would require the town to pay some, and perhaps a large part of the expense, nevertheless, the town is favored by an exemption from its just share of the burden, and the other interested party before the Commissioners is by the terms of the law required to bear the burden of both. In other words, even in this aspect of the matter, as between it and the town, the railroad company is denied the equal protection of the laws.

II. Plaintiff claims that by virtue of this law and the order made thereunder, its property is taken without due process of law.

The Supreme Court of Connecticut justifies this taking of plaintiff's property by the following reasoning: "This statute is in its operation an amendment to the charter of each of the railroad corporations affected by it. It imposes on the plaintiff, being a corporation of that kind, an obligation which, previous to its passage, the charter of the plaintiff did not impose; but as that charter contained the provision that it might be altered at pleasure by the legislature the statute is binding upon it."

The scope of this claim seems wider than that of the claim made in support of the attack by the legislature of New York on the Broadway Surface Railroad Company, yet the New York Court of Appeals held that claim to be contrary to the constitution, in *People v. O'Brien*, 111 New York, 1. In that case all that was attempted to be affected was a franchise created by an amendable charter. The Supreme Court

of Connecticut holds, that because the charter of a corporation may be amended, there is no limitation on the rights of the legislature over the property of that corporation.

The right to amend the charter of a corporation does not include the right to arbitrarily deprive the stockholders of this corporation of what in substance is their property, held by them, it is true, for purposes of management and control, under a corporate organization created by a special law, but being nevertheless private property, not by virtue of any charter, but by force of the most fundamental and general laws of modern society, which from their nature necessarily protect alike and fully all legitimate acquisition of the members of the community, no matter whether held by them as individuals, partners, associations, or corporations.

Calling a railroad a highway does not make the person or corporation operating the railroad a piece of governmental machinery like the town; and because a State may lay taxes through the agency of the towns, and so pay for a public service, it does not follow that it may force a private corporation to use up its private property for the same purpose.

There is here admittedly no case of a legal nuisance or of a legal wrong of any kind committed by plaintiff, but the State is dealing in this law and the proceedings of the Railroad Commissioners thereunder, with crossings which were created in their present form nearly fifty years ago with full legislative authority, and which have received additional legislative sanction, less than fourteen years ago; and in applying to the plaintiff in a case of this kind rules applicable to joint tortfeasors, the State of Connecticut covers with only a thin disguise the taking of plaintiff's property without due process of law.

It is suggested that the plaintiff has had a hearing, and that this is enough to constitute due process of law.

There was a hearing on the question, how the highway should be carried over or under the railroad. There was also a hearing as to whether plaintiff's financial ability warranted the order. But before the hearings began at all, it was settled by the prejudgment of this extraordinary board of three men, that this particular one among the more dangerous crossings was the one to be removed, and, as a necessary consequence under the law, that no matter how much of the danger at the crossing is created by the condition of the adjoining highways, for which the town of Bristol is alone responsible; no matter even, if, on investigation, it could be shown that in this case the railroad company is not responsible for any of the danger at the crossing, nevertheless, the railroad company is to pay for the whole work ordered.

Moreover, it should be noted that the railroad company is not required by this order to merely make reasonable changes in the grade of its railroad. Not only is it ordered to move its railroad tracks over to ground now occupied by substantial buildings, owned by private persons, and to build a costly bridge, but it is also ordered to go entirely outside of its own location and to make safe and comfortable grades not merely on Main street, but on two other compactly-built-up streets, named in the record at page 9, which do not cross the railroad at all, and is even to pay "the special damages which the owner of any land adjoining the

public highways shall sustain by reason of any change in the grade of such highways."

It seems to the plaintiff that when it is denied a hearing as to all the matters of primary importance, it is a hollow mockery to talk about its having its day in court because it is allowed to be heard on a question so narrowed as merely to mean whether it can get money to pay its bill, or because its engineers are allowed to suggest modifications of the plans presented, so as to obviate the ordering of impracticable railroad construction.

Mr. Chief Justice Fuller, after stating the case, delivered the opinion of the court.

The reasons of appeal to the Supreme Court were filed October 7, 1892, and assigned errors in the action of the Superior Court in dealing with various paragraphs of the petition of appeal from the order of the Railway Commissioners, and in the admission and exclusion of evidence, but contained nothing questioning the constitutionality of the law under which the proceedings were had until they were amended, December 17, 1892, by adding the paragraphs raising that question. This tardiness in bringing the contention forward is perhaps not to be wondered at in view of the repeated adjudications of the Supreme Court of Connecticut sustaining the constitutionality of similar laws, as well as of this particular statute, and of the rulings of this court in reference to like legislation.

A motion to dismiss the writ of error for want of jurisdiction is now made, and with it is united a motion to affirm on the ground, in the language of our rule (Rule 6, paragraph 5), "that although the record may show that this court has jurisdiction, it is manifest that the writ or appeal was taken for delay only, or that the question on which the jurisdiction depends is so frivolous as not to need further argument."

We agree with counsel that this court has jurisdiction, but are of opinion that the principles to be applied in its exercise are so well settled that further argument is not needed, and that, this being so, the jurisdiction may be said, under the circumstances, to rest on so narrow a foundation as to give color to the motion to dismiss and justify the disposal of the case on the motion to affirm.

It must be admitted that the act of June 19, 1889, is directed to the extinction of grade crossings as a menace to public safety, and that it is therefore within the exercise of the police power of the State. And, as before stated, the constitutionality of similar prior statutes as well as of that in question, tested by the provisions of the state of Federal constitutions, has been repeatedly sustained by the courts of Connecticut. *Woodruff vs. Catlin*, 54 Connecticut, 277, 295; *Westbrook's Appeal*, 57 Connecticut, 95; *New York & New England Railroad Company's Appeal*, 58 Connecticut, 532; *Woodruff vs. Railroad Company*, 59 Connecticut, 63; *State's Attorney vs. Branford*, 59 Connecticut, 402; *New York & New England Railroad vs. Waterbury*, 60 Connecticut, 1; *Middletown vs. New York, New Haven & Hartford Railroad*, 62 Connecticut, 492.

In *Woodruff vs. Catlin*, the court, speaking through Pardee, *J.*, said in reference to a similar statute: "The act, in scope and purpose, concerns protection of life. Neither in intent nor fact does it increase or diminish the assets either of the city or the railroad corporations. It is the exercise of the governmental power and duty to secure a safe highway. The

legislature having determined that the intersection of two railways with a highway in the city of Hartford at grade is a nuisance dangerous to life, in the absence of action on the part either of the city or of the railroads, may compel them, severally, to become the owners of the right to lay out new highways and new railways over such land and in such manner as will separate the grade of the railways from that of the highway at intersection; may compel them to use the right for the accomplishment of the desired end; may determine that the expense shall be paid by either corporation alone or in part by both; and may enforce obedience to its judgment. That the legislature of this State has the power to do all this, for the specified purpose, and to do it through the instrumentality of a commission, it is now only necessary to state, not to argue."

And as to this act, the court, in 58 Connecticut, 552, on this company's appeal, held that grade crossings were in the nature of nuisances which it was competent for the legislature to cause to be abated, and that it could, in its discretion, require any party responsible for the creation of the evil, in the discharge of what were in a sense governmental duties, to pay any part, or all, of the expense of such abatement.

It is likewise thoroughly established in this court that the inhibitions of the Constitution of the United States upon the impairment of the obligation of contracts, or the deprivation of property without due process, or of the equal protection of the laws, by the States, are not violated by the legitimate exercise of legislative power in securing the public safety, health, and morals. The governmental power of self-protection cannot be contracted away, nor can the exercise of rights granted, nor the use of property, be withdrawn from the implied liability to governmental regulation in particulars essential to the preservation of the community from injury. *Beer Company vs. Massachusetts*, 97 U. S., 25; *Fertilizing Company vs. Hyde Park*, 97 U. S., 659; *Barbier vs. Connolly*, 113 U. S., 27; *New Orleans Gas Company vs. Louisiana Light Company*, 115 U. S., 650; *Mugler vs. Kansas*, 123 U. S., 623; *Budd vs. New York*, 143 U. S., 517. And also that "a power reserved to the legislature to alter, amend, or repeal a charter authorizes it to make any alteration or amendment of a charter granted subject to it, which will not defeat or substantially impair the object of the grant, or any rights vested under it, and which the legislature may deem necessary to secure either that object or any public right." *Close vs. Glenwood Cemetery*, 107 U. S., 466, 476; *Spring Valley Waterworks vs. Schottler*, 110 U. S., 347; *Pennsylvania College Cases*, 13 Wall., 190; *Tomlinson vs. Jessup*, 15 Wall., 454.

The charter of this company was subject to the legislative power over it of amendment, alteration, or repeal, specifically and under general law. *Priv. and Spec. Laws Conn.*, Vol. 5, pp. 543, 547; Vol. 7, p. 466; Vol. 8, p. 353; *Spec. Laws Conn.* 1881, p. 64; *Stats.* 1875, 278; *Gen. Stats.* 1888, sec. 1909; *New York & New England Railroad vs. Waterbury*, 60 Conn., 1.

The contention seems to be, however, that the legislature, in discharging the duty of the State to protect its citizens, has authorized by the enactment in question that to be done which is, in certain particulars, so unreasonable and so obviously unjustified by the necessity invoked as to bring the act within constitutional prohibitions.

The argument is that the existing grades of railroad crossings were legally established, in accordance with the then wishes of the people, but,

with the increase in population, crossings formerly safe had become no longer so; that the highways were chiefly for the benefit of the local public, and it was the duty of the local municipal corporation to keep them safe; that this law applied to railroad corporations, treatment never accorded to other citizens, in allowing the imposition of the entire expense of change of grade, both costs and damages, irrespective of benefits, on those companies, and in that respect, and in the exemption of the town from its just share of the burden, denied to them the equal protection of the laws.

And further, that the order, and therefore the laws which was held to authorize it, amounted to a taking of property without due process, in that it required the removal of tracks many feet from their present location, involving the destruction of much private property; the excavation of the principal highway and those communicating, and the building of an expensive iron bridge, all at the sole expense, including damages, of the company, without a hearing as to the extent of the several responsibilities of the company and the town, or as to the expense of the removal of this dangerous crossing as compared with other dangerous crossings, or of the degree of the responsibility of the company for the dangers existing at this particular crossing. The objection is not that hearing was not required and accorded, which it could not well be in view of the protracted proceedings before the commissioners and the Superior Court and the review in the Supreme Court, but that the scope of inquiry was not as broad as the statute should have allowed, and that the particular crossing to be removed was authorized to be prejudged.

It is further objected that the Supreme Court had so construed the statute that upon the issue whether the financial condition of the company warranted the order, no question of law could be raised as to the extent of the burdens, which a certain amount of financial ability would warrant, and thus in that aspect, by reason of the large amount of expenditure which might be, and as a matter of fact was in this instance, required, the obligation of the contracts made by the company with the holders of its securities was impaired. Complaint is made in this connection of the striking out by the Superior Court of certain paragraphs of the petition on appeal, held by that court and the Supreme Court to plead mere matters of evidence, and the decision by the Supreme Court that all the material issues were met by the findings. Those issues were stated by the court to be whether or not the company's directors had removed or applied for the removal of a grade crossing as required by the statute; whether or not the grade crossing ordered by the commissioners to be removed was in fact a dangerous one which the directors ought to have removed, or for the removal of which the directors ought to have applied; and whether or not the company's financial condition was such as to warrant the order.

And upon these premises it is urged in addition that the right to amend the charter of the corporation was not controlling, because that did not include the right to arbitrarily deprive the stockholders of their property, which, though held by them, for purposes of management and control, under a corporate organization created by special law, was, nevertheless, private property, not by virtue of the charter, but "by force of the most fundamental and general laws of modern society, which from

their nature necessarily protect alike and fully all legitimate acquisitions of the members of the community, no matter whether held by them as individuals, or partnerships, or associations, or corporations."

The Supreme Court of Connecticut held that the statute operated as an amendment to the charters of the railroad corporations affected by it; that as grade crossings are in the nature of nuisances, the legislature had a right to cause them to be abated, and to require either party to pay the whole or any portion of the expense; that the statute was not unconstitutional in authorizing the commissioners to determine their own jurisdiction, and that, besides, the right of appeal saved the railroad companies from any harm from their findings; that it was the settled policy of the State to abolish grade crossings as rapidly as could be reasonably done; and that all general laws and police regulations affecting corporations were binding upon them without their assent.

We are asked upon the grounds above indicated to adjudge that the highest tribunal of the State in which these proceedings were had, committed, in reaching these conclusions, errors so gross as to amount in law to a denial by the State of rights secured to the company by the Constitution of the United States, or that the statute itself is void by reason of infraction of the provisions of that instrument.

But this court cannot proceed upon general ideas of the requirements of natural justice apart from the provisions of the constitution supposed to be involved, and in respect of them we are of opinion that our interposition cannot be successfully invoked.

As observed by Mr. Justice Miller in *Davidson vs. New Orleans*, 96 U. S., 97, 104, the Fourteenth Amendment cannot be availed of "as a means of bringing to the test of the decision of this court the abstract opinions of every unsuccessful litigant in the State court of the justice of the decision against him, and of the merits of the legislation on which such a decision may be founded." To use the language of Mr. Justice Field, in *Missouri Pacific Railway vs. Humes*, 115 U. S., 512, 520, "it is hardly necessary to say, that the hardship, impolicy, or injustice of State laws is not necessarily an objection to their constitutional validity; and that the remedy for evils of that character is to be sought from State legislatures."

The conclusions of this court have been repeatedly announced to the effect that though railroad corporations are private corporations as distinguished from those created for municipal and governmental purposes, their uses are public, and they are invested with the right of eminent domain, only to be exercised for public purposes; that therefore they are subject to legislative control in all respects necessary to protect the public against danger, injustice, and oppression; that the State has power to exercise this control through boards of commissioners; that there is no unjust discrimination and no denial of the equal protection of the laws in regulations applicable to all railroad corporations alike; nor is there necessarily such denial nor an infringement of the obligation of contracts in the imposition upon them in particular instances of the entire expense of the performance of acts required in the public interest. in the exercise of legislative discretion; nor are they thereby deprived of property without due process of law, by statutes under which the result is ascertained in a mode suited to the nature of the case, and not merely

arbitrary and capricious; and that the adjudication of the highest court of a State, that, in such particulars, a law enacted in the exercise of the police power of the State is valid, will not be reversed by this court on the ground of an infraction of the Constitution of the United States. Nashville, etc., Railway *vs.* Alabama, 128 U. S., 96; Georgia Railroad & Banking Company *vs.* Smith, 128 U. S., 174; Minneapolis, etc., Railway *vs.* Beckwith, 129 U. S., 26; Dent *vs.* West Virginia, 129 U. S., 114; Charlotte, Columbia, etc., Railroad *vs.* Gibbs, 142 U. S., 386; Minneapolis & St. Louis Railway *vs.* Emmons, 149 U. S., 364.

Judgment affirmed.

TABLE SHOWING THE HIGHWAY CROSSINGS IN EACH
RAILROAD

TOWNS.	No. of crossings.	Over the track.	Under the track.	At grade.	With gates.	With flagmen.	With signal bells.	Constructed since rail-road was built.	For access to stations.	Trespass crossings.
Andover,	8	...	1	7	...	...	...	...	...	...
Ansonia,	3	1	...	2	1	...	...	...	...	...
Avon,	8	...	1	7	...	...	...	...	...	...
Barkhamsted,	5	...	...	5	...	...	...	...	...	...
Beacon Falls,	5	...	1	4	...	...	...	...	...	1
Berlin,	10	3	1	6	...	...	...	...	...	...
Bethel,	17	...	2	15	1	...	...	1	...	...
Bloomfield,	12	...	...	12	...	...	...	...	...	...
Bolton,	5	2	...	3	...	1	...	...	...	...
Branford,	11	4	4	3	...	...	...	2	...	...
Brookfield,	17	...	1	16	...	...	...	...	...	1
Bridgeport,	29	1	...	28	15	1	...	20	1	11
Bristol,	17	2	2	13	2	...	...	2	...	...
Burlington,	2	...	1	1	...	...	...	...	...	...
Canton,	16	2	...	14	...	...	2	...	...	...
Canaan,	8	...	1	7	...	...	...	1	1	1
Canterbury,	2	...	...	2	...	...	...	...	...	...
Chaplin,	1	...	1	...	...	...	...	...	...	...
Chatham,	7	1	2	4	...	...	...	...	...	...
Chester,	4	...	...	4	...	...	...	...	...	...
Cheshire,	11	...	...	11	...	...	...	...	...	...
Clinton,	7	1	...	6	...	...	...	...	...	...
Colchester,	6	...	1	5	...	...	...	...	...	...
Columbia,	2	...	...	2	...	...	...	...	...	...
Cornwall,	22	1	...	21	...	...	...	2	1	1
Coventry,	4	...	...	4	...	...	...	...	...	...
Cromwell,	12	1	2	9	...	...	...	...	...	1
Danbury,	18	1	1	16	3	2	1	...	2	3
Darien,	8	1	...	7	1	1	...	...	...	...
Derby,	11	1	...	10	3	1	...	...	...	7
Durham,	1	...	1	...	...	...	...	...	...	...
East Haven,	2	2	...	...	...	...	...	...	...	...
East Hartford,	9	...	1	8	1	...	...	...	...	...
East Lyme,	2	...	2	...	...	...	...	...	...	...
East Windsor,	10	...	...	10	...	...	...	...	...	...
Ellington,	4	...	...	4	...	...	...	...	...	...
Enfield,	14	...	2	12	...	...	...	1	...	3
Essex,	7	...	...	7	...	...	...	...	...	...
Fairfield,	12	4	8	...	...	...	...	...	...	...
Farmington,	12	...	1	11	...	...	...	...	...	...
Franklin,	4	...	...	4	...	...	...	...	...	...
Granby,	5	...	...	5	...	...	...	...	...	...
Greenwich,	13	2	7	4	...	...	...	1	...	...
Griswold,	5	...	...	5	1	...	1	...	...	1
Groton,	13	3	5	5	...	2	...	1	...	1
Guilford,	5	2	1	2	...	...	...	...	...	...
Haddam,	7	1	...	6	...	...	...	...	...	...
Hampton,	9	2	...	7	...	...	...	1	...	...
Hamden,	14	3	5	6	...	...	...	...	4	4
Hartford,	52	10	14	28	15	6	...	6	...	3
Hebron,	7	...	...	7	...	...	...	...	...	...
Huntington,	2	1	...	1	...	...	...	...	...	...
Totals carried over,	497	52	69	376	43	14	4	38	9	38

TOWN, AND ON EACH RAILROAD, AS REPORTED BY THE COMPANIES.

HIGHWAY CROSSINGS AT GRADE ON EACH RAILROAD.

B. & N. Y. A. L. R.	D. & N. E. R.	H. & C. V. R. R.	H. & C. W. R. R.	Housatonic R. R.	M. W. & C. R. R. R.	Naugatuck R. R.	N. H. & D. R. R.	N. H. & N. R. R.	N. L. N. R. R.	N. Y. & N. E. R. R.	N. Y. & N. H. R. R.	N. Y. P. & B. R. R.	Nor. & Wor. R. R.	S. L. & N. R. R.	Shore Line R. R.	South Manches-ter R. R.	Total.
							2			7							7
								7									2
			5														7
						4											5
																	4
	15											6					6
			12							3							15
				14						2							12
				9							19						3
										13							3
								1									16
			11					3									28
				7													13
																	1
																	14
										2							7
																	2
4																	4
		4															4
								11									11
																	6
5																	5
1										1							2
				21													21
									1	3							4
																	9
	4		3		4					11		2					16
											7						7
						7	3										10
										8							8
										10							10
									1	3							4
										8							12
			7								4						7
								11									11
									4								4
								5									5
											4						4
												5					5
													5				5
															2		2
			6							7							6
								5			1						7
			9	2						8	9						6
7																	28
																	7
				1													1
17	12	22	22	52	4	11	5	42	2	22	52	5	5		11		232

TABLE SHOWING THE HIGHWAY CROSSINGS IN EACH
RAILROAD

TOWNS.	No. of crossings.	Over the track.	Under the track.	At grade.	With gates.	With flagmen.	With signal bells.	Constructed since railroad was built.	For access to stations.	Trespass crossings.
Totals brought over,.....	497	52	69	376	43	14	4	38	9	38
Kent,.....	12	...	...	12	...	...	...	1	1	...
Killingly,	9	1	1	7	2	...	...	...	...	2
Lebanon,.....	5	2	...	3	...	...	...	...	...	...
Ledyard,	1	...	...	1	...	...	...	...	...	...
Litchfield,.....	16	1	...	15	...	...	...	1	...	2
Lisbon,.....	6	1	2	3	...	...	...	...	...	...
Lyme,.....	6	3	3	...	...	...	...	...	...	...
Madison,	7	3	3	1	...	...	...	...	...	...
Manchester,.....	13	1	3	9	...	1	...	2	...	...
Mansfield,	9	1	...	8	...	...	...	...	...	...
Meriden,.....	20	4	1	15	8	...	1	5	...	...
Middlebury,	3	...	1	2	...	...	...	...	...	...
Middlefield,	8	1	1	6	...	...	...	...	...	...
Middletown, ...	42	10	5	27	3	...	7	...	...	...
Milford,	18	5	6	7	...	...	1	...	...	1
Montville,	3	...	...	3	...	...	...	...	...	...
Monroe,.....	10	...	4	6	...	...	...	...	1	1
Morris,	3	...	...	3	...	...	...	...	...	1
Naugatuck,	9	...	2	7	1	...	...	...	...	...
New Britain,.....	23	2	1	20	7	4	1	...	...	...
New Canaan,.....	4	1	...	3	...	...	...	1	...	...
Newington,.....	6	...	1	5	1	...	...	1	...	2
New Haven,.....	68	35	5	28	6	12	1	7	...	9
New Hartford,.....	11	...	3	8	...	...	1	...	...	...
New London,.....	15	2	5	8	6	1	...	...	...	8
New Milford,.....	25	...	...	25	...	...	...	2	...	...
Newtown,.....	45	2	2	41	...	...	...	2	1	1
Norfolk,.....	8	3	2	3	...	...	...	...	...	...
North Canaan,.....	15	...	...	15	...	...	...	1	1	1
North Haven,.....	7	1	1	5	...	...	...	1	...	1
Norwalk,	33	3	6	24	7	...	...	...	3	7
Norwich,	14	7	1	6	...	2	1	...	2	2
Old Saybrook,.....	12	3	1	8	...	...	...	...	...	...
Orange,	26	4	12	10	...	...	1	1	...	2
Oxford,	7	2	...	5	...	...	...	...	...	...
Pomfret,.....	9	3	1	5	...	...	...	...	...	...
Portland,	11	1	2	8	...	...	...	...	...	...
Plainfield,	24	1	...	23	...	...	...	...	...	2
Plainville,	6	1	...	5	...	1	...	...	...	2
Plymouth,	7	2	...	5	...	...	...	1	...	...
Putnam,	16	4	5	7	4	...	...	...	...	...
Redding,	10	...	2	8	...	...	...	...	...	...
Ridgefield,	10	...	...	10	...	...	...	...	...	...
Rocky Hill,.....	3	...	...	3	...	...	...	...	...	...
Roxbury,	5	...	...	5	...	...	...	...	...	...
Salisbury,.....	12	1	2	9	...	...	3	...	...	...
Saybrook,	3	...	...	3	...	...	...	...	...	...
Seymour,	4	1	...	3	...	...	1	...	...	...
Totals carried over,.....	1,136	164	153	819	88	35	22	64	18	82

TABLE SHOWING THE HIGHWAY CROSSINGS IN EACH
RAILROAD

TOWNS.	No. of crossings.	Over the track.	Under the track.	At grade.	With gates.	With flagmen.	With signal bells.	Constructed since railroad was built.	For access to stations.	Trespass crossings.
Totals brought over,.....	1,136	164	153	819	88	35	22	64	18	82
Simsbury,.....	17	1	2	14	.....	.....	.....	1	.....	.....
Southbury,.....	14	1	6	7	.....	.....	.....	.....	.....	.....
Southington,.....	17	.....	.....	17	.....	.....	1	3	1	2
South Windsor,.....	10	.....	.....	10	.....	.....	.....	.....	.....	.....
Sprague,.....	4	.....	.....	4	.....	.....	1	.....	.....	.....
Stafford,.....	8	.....	.....	8	.....	.....	.....	.....	.....	2
Stamford,.....	14	3	.....	11	5	2	.....	2	.....	.....
Sterling,.....	5	.....	.....	5	.....	.....	.....	.....	.....	.....
Stonington,.....	14	2	1	11	7	.....	1	2	.....	2
Stratford,.....	9	2	5	2	1	.....	.....	2	.....	.....
Suffield,.....	8	.....	2	6	.....	.....	.....	.....	.....	.....
Tolland,.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....
Torrington,.....	9	1	.....	8	1	.....	.....	.....	.....	2
Thomaston,.....	3	.....	.....	3	1	.....	.....	.....	.....	1
Thompson,.....	25	2	3	20	.....	.....	.....	1	1	3
Trumbull,.....	6	.....	.....	6	.....	.....	.....	.....	.....	1
Vernon,.....	16	.....	4	12	.....	1	.....	.....	.....	.....
Wallingford,.....	22	1	2	19	2	.....	.....	.....	.....	.....
Washington,.....	12	.....	.....	12	.....	.....	.....	2	.....	1
Waterbury,.....	20	1	4	15	3	.....	1	.....	.....	6
Waterford,.....	5	1	2	2	.....	.....	1	.....	.....	.....
Watertown,.....	5	.....	3	2	.....	.....	.....	.....	.....	.....
Westbrook,.....	4	3	1	.....	.....	.....	.....	.....	.....	.....
West Hartford,.....	4	.....	1	3	.....	.....	.....	.....	.....	1
Westport,.....	10	6	4	.....	.....	.....	.....	.....	.....	.....
Wethersfield,.....	8	.....	.....	8	1	.....	.....	.....	.....	.....
Windsor,.....	12	.....	.....	12	.....	.....	.....	.....	.....	.....
Windsor Locks,.....	3	.....	.....	3	.....	.....	.....	.....	.....	.....
Windham,.....	22	2	2	18	3	2	.....	.....	1	4
Wilton,.....	16	1	.....	15	.....	.....	.....	.....	.....	1
Willington,.....	5	.....	.....	5	.....	.....	.....	1	.....	.....
Winchester,.....	15	1	4	10	.....	.....	2	.....	.....	.....
Totals,.....	1,479	192	199	1,088	112	40	29	78	21	108

TOWN, AND ON EACH RAILROAD, AS REPORTED BY THE COMPANIES.

HIGHWAY CROSSINGS AT GRADE ON EACH RAILROAD.

B. & N. Y. A. L. R. R.	D. & N. R. R.	H. & C. V. R. R.	H. & C. W. R. R.	Housatonic R. R.	M. & W. & C. R. R.	Naugatuck R. R.	N. H. & D. R. R.	N. H. & N. R. R.	N. L. N. R. R.	N. Y. & N. E. R. R.	N. Y., N. H. & H. R. R.	N. Y., P. & B. R. R.	Nor. & Worcester R. R.	S., L. & N. R. R.	Shore Line R. R.	South Manchester R. R.	Total.
41	63	58	56	122	15	31	13	55	23	154	95	11	31	20	28	3	819
...	7	...	...	...	...	7	...	4	...	...	...	3	...	...	14
...	17	...	...	...	...	...	...	...	...	7
...	10	...	...	...	...	...	...	17
...	4	...	...	...	...	...	...	10
...	8	...	...	...	...	...	...	...	4
...	8
...	5	11	...	...	...	...	...	11
...	11	...	...	...	...	5
...	2	...	...	...	...	...	11
...	6	...	...	...	...	...	2
...	1	...	...	...	...	...	...	...	6
...	8	...	...	...	...	...	...	...	...	...	...	1
...	3	...	...	...	...	...	...	...	...	...	...	8
...	12	...	...	...	...	...	...	3
...	6	...	...	...	...	...	...	12	...	8	...	...	...	20
...	12	...	...	...	...	...	6
...	12
7	12	...	...	...	...	...	19
...	12	...	...	12
...	6	...	...	...	9	...	...	...	...	1	...	15
...	1	...	...	...	...	...	...	...	2
...	2	...	...	...	...	...	...	...	...	...	...	2
...	2	1	...	...	...	...	...	3
...
...	...	8	...	...	...	...	...	...	...	...	12	...	...	...	...	...	8
...	3	...	...	...	...	...	12
...	6	11	...	...	...	...	...	...	3
1	18
...	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15
...	5	...	...	...	...	...	...	...	5
...	7	...	...	3	...	...	...	...	...	...	...	...	...	...	10
49	78	66	70	128	15	53	13	79	44	223	142	22	39	35	29	3	1088

The crossings reported on the N. Y., N. H. & H. R. R. include those on the Stamford & New Canaan R. R., and the Middletown, New Britain, and Suffield branches.

The N. Y. & N. E. R. R. includes the Rockville and the Connecticut Central railroad.

The Naugatuck R. R. includes the Watertown & Waterbury R. R.

The B. & N. Y. A. L. R. R. includes the Colchester Branch.

The above tables are based upon reports originally made in 1888, and corrected by the railroad companies up to date of this report.

STATISTICAL TABLES.

TABLE I.

Number.	1	2	3	4	5		6		7		8		9		10	
					LENGTH OF MAIN LINE AND BRANCHES.		DOUBLE TRACK.		THIRD TRACK.		FOURTH TRACK.		SIDINGS.		LENGTH OF ROAD, SINGLE TRACK MILES.	
		Chartered.	Opened for use.	From	To	Total.	In Conn.	Total.	In Conn.	Total.	In Conn.	Total.	In Conn.	Total.	In Conn.	Total.
1	Boston & New York Air Line. ¹	1875	1870-73	New Haven, Ct.	Willimantic, Ct.	51.50	51.50	.....	.....	.....	.....	.....	13.16	13.16	64.66	64.66
2	Colchester, - - - - -	1876	1877	Turnerville, - - - - -	Colchester, Ct.	3.59	3.59	.....	.....	.....	.....	.....	.90	.90	4.49	4.49
3	Danbury & Norwalk, - - - - -	1880	1882	Danbury, Ct.	So. Norwalk, Ct.	23.59	23.59	.....	.....	.....	.....	.....	10.94	10.94	34.53	34.53
	Wilson's Point Branch, - - - - -			So. Norwalk, Ct.	Wilson's Point, Ct.	2.69	2.69	.....	.....	.....	.....	.....	4.80	4.80	7.49	7.49
	Ridgefield Branch, ³ - - - - -			Branchville, Ct.	Ridgefield, Ct.	3.97	3.97	.....	.....	.....	.....	.....	.38	.38	4.35	4.35
4	Hartford & Connecticut Western, - - - - -	1881	1871	Hartford, Ct.	Rhinecliff, N. Y.	109.75	67.25	.....	.....	.....	.....	.....	26.50	18.30	136.25	85.55
5	Newburgh, Dutchess & Conn. R., - - - - -			State Line, N. Y.	Millerton, N. Y.	1.95	.....	.....	.....	.....	.....	.....	.....	.....	1.95	.....
	Newtown Branch, - - - - -	1836	1840	Bridgeport, Ct.	Mass. State Line.	74.97	74.97	.....	.....	.....	.....	.....	15.09	15.09	90.06	90.06
	Brookfield Branch, - - - - -			Boisford, Ct.	Huntington, Ct.	9.79	9.79	.....	.....	.....	.....	.....	.84	.84	10.63	10.63
6	Meriden, Waterbury & Conn. River, - - - - -	1882	1885	Br. kfield Junc., Ct.	Danbury, Ct.	5.36	5.36	.....	.....	.....	.....	.....	1.02	1.02	6.38	6.38
	Center St. Extension, - - - - -			Waterbury, Ct.	Cromwell, Ct.	29.50	29.50	.....	.....	.....	.....	.....	7.14	7.14	36.64	36.64
7	Naugatuck, - - - - -	1845	1849	Meriden, Ct.	Meriden, Ct.	.84	.84	.....	.....	.....	.....	.....	.....	.....	.84	.84
	Watertown Branch, - - - - -			Naugatuck Junc., Ct.	Watertown, Ct.	56.55	56.55	.....	.....	.....	.....	.....	18.70	18.70	80.65	80.65
8	New Haven & Derby, - - - - -	1864	1871	Waterbury, Ct.	Ansonia, Ct.	4.44	4.44	.....	.....	.....	.....	.....	.66	.66	5.10	5.10
	Huntington Branch, - - - - -			Derby, Ct.	Huntington, Ct.	12.90	12.90	.....	.....	.....	.....	.....	6.91	6.91	19.81	19.81
9	New Haven & Northampton, - - - - -	1846	1848-81	New Haven, Ct.	Conway Junc., Ms.	94.64	51.26	.....	.....	.....	.....	.....	1.87	1.87	5.66	5.66
	Williamsburgh Branch, - - - - -			Farmington, Ct.	New Hartford, Ct.	14.09	14.09	.....	.....	.....	.....	.....	36.32	19.28	130.96	70.54
	Turner's Falls Branch, - - - - -			Northampton, Ms.	Williamsburgh, Ms.	7.51	.....	.....	.....	.....	.....	.....	3.12	3.12	17.21	17.21
	Holyoke & Westfield Branch, - - - - -			So. Deerfield, Mass.	Turner's Falls, Ms.	10.07	.....	.....	.....	.....	.....	.....	2.35	2.35	8.83	8.83
10	New London Northern, ⁴ - - - - -	1859	1849-81	Westfield, Mass.	Holyoke, Mass.	10.39	.....	.....	.....	.....	.....	.....	17.66	17.66	21.98	21.98
11	New York & New England, ⁵ - - - - -	1873	1849-81	New London, Ct.	Brattleboro, Vt.	121.00	56.00	.....	.....	.....	.....	.....	39.02	20.07	160.02	76.07
				Boston, Mass.	Hopewell Junc. N. Y.	214.98	134.17	.....	.....	.....	.....	.....	113.36	57.43	440.02	232.23
				Worcester, N. Y.	Fulton H'uson, N. Y.	1.71	.....	.....	.....	.....	.....	.....	6.26	6.26	7.97	7.97
				Providence, R. I.	Willimantic, Ct.	58.32	31.96	.....	.....	.....	.....	.....	18.08	6.94	77.76	38.90
				Cook St., N. wt'n. Ms.	Woonsocket, R. I.	28.67	.....	.....	.....	.....	.....	.....	6.33	.....	35.00	35.00
				East Thompson, Ct.	Southbridge, Mass.	17.36	5.35	.....	.....	.....	.....	.....	2.82	.12	20.18	5.47
				East Hartford, Ct.	Jc. B. & A. R. Spfld	27.48	20.17	.....	.....	.....	.....	.....	4.80	2.59	32.28	22.76
				Melrose, Ct.	W. St. Rockville, Ct.	7.22	7.22	.....	.....	.....	.....	.....	.24	.24	7.46	7.46
				Dedham Junc., Ms.	Dedham, Mass.	1.53	.....	.....	.....	.....	.....	.....	.86	.....	2.39	2.39
				Islington, Mass.	"	2.00	.....	.....	.....	.....	.....	.....	.....	.....	2.00	.....
				Dorrence St., - - - - -	Providence, R. I.	.62	.....	.....	.....	.....	.....	.....	.98	.98	.65	.65
				Freight Branch, - - - - -	Hartford, Ct.	.67	.....	.....	.....	.....	.....	.....	.75	.75	1.65	1.65
				Vernon, Ct.	Rockville, Ct.	4.43	4.43	.....	.....	.....	.....	.....	.....	.....	5.18	5.18

TABLE I. — CONCLUDED.

Number.	1	2	3	4	5		6		7		8		9		10	
					L'NGTH OF MAIN LINE AND BRANCHES.		DOUBLE TRACK.		THIRD TRACK.		FOURTH TRACK.		SIDINGS.		LENGTH OF ROAD, SINGLE TRACK MILES.	
		Chartered.	Opened for use.	Location of Road.	From	To	Total.	In Conn.	Total.	In Conn.	Total.	In Conn.	Total.	In Conn.	Total.	In Conn.
12	New York, New Haven & Hartford, ⁶	1871	1839-70													
	New Canaan Branch,				Woodlawn Junc. N.Y.	Springfield, Mass.	122.44	102.45	24.38	14.56	24.38	14.56	108.82	94.33	402.46	398.35
	Belle Lock Branch,				Stamford, Ct.	New Canaan, Ct.	7.66	7.65					.85	.85	8.51	8.51
	Middletown Branch,				Shore Line J'n. N.H.	Belle Dock, N.H.	1.00	1.00					5.06	5.06	7.06	7.06
	New Britain Branch,				Beelin, Ct.	Middletown, Ct.	9.70	9.70		1.00			4.73	4.73	14.43	14.43
	Harford Freight,					New Britain, Ct.	3.18	3.18					3.66	3.66	6.84	6.84
	Suffield Division,				Harford, Ct.	Harford, Ct.	4.84	4.84					1.02	1.02	5.84	5.84
	Stonington Division,				Windsor Locks, Ct.	Suffield, Ct.	4.32	4.32					8.32	8.32	54.72	54.72
	Warwick & Oakland Beach,				Harford, Ct.	Fennick, Ct.	46.20	46.20					23.30	7.38	147.16	43.70
	Pontiac Branch,				New London, Ct.	Providence, R. I.	62.11	18.16		61.66			1.62		11.59	
	Harbor Junction,				Auburn, R. I.	Buttonwoods, R. I.	9.90						.39		5.08	
	Groton Branch,				Auburn, R. I.	Pontiac, R. I.	4.69						1.50		5.08	
	Stonington Loop,				Auburn, R. I.	Anderson St., Prov.	3.58						.68		4.78	4.78
	West River Branch,				Groton, Ct.	Poquonock Jc., Ct.	4.10	4.10							.97	
	Harlem River,				Stonington, Ct.	Stonington, Ct.	.97								1.66	1.66
	Berkshire,				Berkshire Div., N.H.	Union Depot, N.H.	1.66	1.66					26.16		49.16	
	Stockbridge & Pittsfield,				Harlem River, N.Y.	New Rochelle, N.Y.	11.50			11.50			4.42		24.95	
	Providence & Worcester,				Conn. State Line,	W. St. bridge, Ms.	20.53						1.71		4.35	
	East Providence Branch,				W. St. bridge, Ms.	State Line, Ms.	2.64						5.39		27.41	
	Pawtuxet Valley,				Van Deusenville Jc.	Pittsfield, Ms.	22.02			39.88		1.90	43.44		128.02	
					Providence, R. I.	Worcester, Ms.	40.90			1.90			7.65		14.65	
					Valley Falls, R. I.	Hope, R. I.	7.00						1.20		6.87	
					Pontiac, R. I.		5.67									
	Old Colony Main Line,				Boston, Mass.	Newport, R. I.	67.79		1.53		1.03				117.37	
	"				Mayflower Park.	Somerset Junction.	39.31								57.75	
	"				Middleboro, Mass.	Provincetown, Ms.	85.66								105.38	
	"				Raynham, Mass.	Whitcomb Jc., Ms.	3.38						166.66		6.76	
	"				Braintree, Mass.	Plymouth, Mass.	32.34								40.75	
	"				So. Braintree, Mass.	Plymouth, Mass.	26.04								39.04	
	"				Framingham, Mass.	Lowell, Mass.	26.12								30.48	
	"				New Bedford, Ms.	Fitchburg, Mass.	91.25		.91						141.50	
	Dorchester & Milton Branch,				Neponset, Mass.	Mattapan, Mass.	3.30						1.31		4.61	
	Stoughton Branch,				Stoughton, Mass.	Stoughton, Mass.	1.65			1.65			.68		3.88	
	Shawmut Branch,				Stoughton Br. Jc. Ms.	Shawmut & Milt Jc.	2.39						.43		2.82	
	Bridgewater Branch,				Whitman Sq., Mass.	Bridge w/ir'n Wks	6.12						1.63		7.75	
	Brookline Branch,				Whitman, Mass.	Westdale, Mass.	7.50								.75	
	Granite Branch,				Elmwood, Mass.	Braintree, Mass.	5.41						3.31		8.72	
	Hyanis Branch,				Yarmouth, Mass.	Hyanis, Mass.	5.05						2.09		7.14	
	Wood's Holl Branch,				Buzzard's Bay.	Wood's Holl.	17.54						2.16		19.70	

TABLE II. — CAPITAL STOCK.

Number.	RAILROADS.	11 Total amount authorized.	12 Issued for Cash.	13 Issued for Bonds.	14 Issued for Stock of other Corporations.	15 Issued for undivided Earnings.	16 Issued for increased Valuation.
1	Boston & New York Air Line,.....	\$4,000,000.00	.....	\$2,998,500.00	.....	.....	.....
2	Colchester,.....	50,000.00	\$25,000.00	.....	.....	.....	.....
3	Danbury & Norwalk,.....	1,000,000.00	338,416.25	.....	.....	\$101,583.75	\$160,000.00
4	Hartford & Connecticut Western,.....	3,000,000.00	.....	1,900,200.00	.....	.....	.....
5	Housatonic,.....	3,000,000.00	23,300.00	.....	.....	.....	.....
6	Meriden, Waterbury & Conn. River,...	500,000.00	.....	.....	.....	.....	.....
7	Naugatuck,.....	2,000,000.00	397,696.00	273,000.00	.....	142,700.00	448,825.00
8	New Haven & Derby,.....	700,000.00	447,000.00	.....	.....	.....	.....
9	New Haven & Northampton,.....	500,000.00	1,882,000.00	.....	.....	.....	.....
10	New London Northern,.....	2,000,000.00	340,673.33	1,102,660.00	\$56,666.67	.....	.....
11	New York & New England,.....	25,000,000.00	3,817,600.00	20,000,000.00	.....	.....	.....
12	New York, New Haven & Hartford,...	100,000,000.00	7,775,000.00	.....	30,167,900.00	.....	.....
13	Norwich & Worcester,.....	3,831,600.00	2,646,900.00	.....	128,900.00	.....	.....
14	Philadelphia, Reading & New England,	6,600,000.00	.....	2,000,000.00	.....	.....	.....
15	Ridgefield & New York,.....	1,250,000.00	205,400.00	.....	.....	.....	.....
16	Shepaug, Litchfield & Northern,.....	600,000.00	.....	600,000.00	.....	.....	.....
17	Shore Line,.....	1,000,000.00	62,845.20	678,125.00	.....	.....	259,029.00
18	South Manchester,.....	40,000.00	40,000.00	.....	.....	.....	.....
	Total,.....	\$155,071,600.00	\$18,001,830.78	\$29,552,485.00	\$30,353,465.67	\$244,283.75	\$367,854.80

TABLE III.—CAPITAL STOCK.

Number.	RAILROADS.	17	18	19	20	21	22	23	24
		Otherwise issued.	Total amount issued.	Total issued per last report.	Issued per mile of road.	Amount held in Connecticut.	Amount same per last report.	Stockholders in	Number of same per last report.
1	Boston & New York Air Line.	\$865,140.88	\$3,863,640.88	\$3,863,640.88	\$75,022.15	\$3,153,500.00	*\$1,615,700.00	444	444
2	Colchester.	.....	25,000.00	25,000.00	6,963.79	25,000.00	25,000.00	1	1
3	Danbury & Norwalk.	.....	600,000.00	600,000.00	16,574.58	590,100.00	459,160.00	65	69
4	Hartford & Conn. Western.	800,000.00	2,700,200.00	2,699,000.00	24,603.19	826,000.00	832,500.00	504	510
5	Housatonic.	2,875,600.00	2,898,900.00	2,898,900.00	32,167.11	2,706,500.00	2,350,900.00	120	119
6	Mer., Waterby & Conn. River.	.....	484,000.00	484,000.00	15,952.53	101,300.00	101,300.00	265	265
7	Naugatuck.	737,779.00	2,000,000.00	2,000,000.00	32,792.26	1,705,700.00	1,712,900.00	344	340
8	New Haven & Derby.	.....	447,000.00	447,000.00	26,782.50	443,300.00	444,900.00	96	86
9	New Haven & Northampton.	578,000.00	2,460,000.00	2,460,000.00	19,475.89	2,438,700.00	2,438,900.00	31	26
10	New London Northern.	.....	1,500,000.00	1,500,000.00	12,396.69	786,800.00	825,000.00	169	172
11	New York & New England.	.....	23,817,600.00	23,817,600.00	66,057.00	328,400.00	102,000.00	90	48
12	N. York, N. Haven & Hartford.	.....	37,942,900.00	32,938,000.00	134,382.50	11,872,100.00	11,329,800.00	2,548	2,447
13	Norwich & Worcester.	.....	2,775,800.00	2,772,200.00	41,955.86	92,100.00	75,800.00	41	38
14	Phila., Reading & N. England.	4,600,000.00	6,600,000.00	6,600,000.00	114,583.00	13,800.00	16,100.00	8	9
15	Ridgefield & New York.	46,400.00	251,800.00	251,800.00	8,269.29	60,050.00	63,850.00	47	49
16	Shepaug, Litchfield & North'n.	.....	600,000.00	600,000.00	18,587.36	85,950.00	85,950.00	10	10
17	Shore Line.	.....	1,000,000.00	1,000,000.00	20,605.81	925,300.00	925,200.00	74	74
18	South Manchester.	.....	40,000.00	40,000.00	17,777.77	40,000.00	40,000.00	9	9
	Total.	\$5,902,919.88	\$90,006,840.88	\$84,997,140.88	\$44,865.67	\$25,694,600.00	\$28,104,960.00	4,866	4,716

* The amount of B. & N. Y. A. L. stock held in Connecticut as reported last year, viz., \$1,615,700, is incorrect. It should have been \$3,188,200, and number of stockholders 445 instead of 444. Discrepancies occurred by its being reported as merged in that of the N. Y., N. H. & H. R. Co., and should have been accounted for the same as if held by another.

+ Amount of D. & N. R. R. stock held in Connecticut should have been reported last year as \$591,600 instead of \$59,160. Error of Treasurer in furnishing information. Grand total of all roads should have been \$24,209,900.

TABLE IV.—DEBT.

Number.	RAILROADS.	25 FUNDED DEBT.		26 CURRENT LIABILITIES.		27 Total Debt.	28 Total per last report.	29 Funded Debt per mile of road.	30 Total Stock and Debt.
		Total.	Total per last report.	Total.	Total per last report.				
1	Boston & N. Y. Air Line.	\$500,000.00	\$500,000.00	.....	.....	\$500,000.00	\$500,000.00	\$9,708.74	\$4,363,640.88
2	Colchester.	25,000.00	25,000.00	.....	.....	25,000.00	25,000.00	6,963.79	50,000.00
3	Danbury & Norwalk.	650,000.00	650,000.00	.....	\$50,000.00	650,000.00	700,000.00	17,955.80	1,250,000.00
4	Hartford & Conn. Western,	700,000.00	700,000.00	.....	.....	722,697.99	722,697.99	6,378.13	3,422,897.99
5	Housatonic.	3,000,000.00	3,000,000.00	.....	.....	3,000,000.00	3,000,000.00	33,288.95	5,898,900.00
6	Meriden, W'bury & Ct. R.,	450,000.00	450,000.00	.....	.....	472,500.00	450,000.00	14,831.90	956,500.00
7	Naugatuck.	150,000.00	150,000.00	.....	.....	150,000.00	150,000.00	2,459.42	2,150,000.00
8	New Haven & Derby.	1,280,000.00	1,526,900.88	.....	.....	1,280,000.00	1,526,900.88	76,692.62	1,727,000.00
9	New Haven & N'hampton,	3,900,000.00	3,900,000.00	.....	.....	3,900,000.00	3,900,000.00	30,876.41	6,360,000.00
10	New London Northern,	1,500,000.00	1,500,000.00	.....	.....	1,501,730.17	1,502,293.67	12,896.69	3,001,730.17
11	N. York & New England,	17,259,061.04	17,187,522.50	1,730.17	2,293.67	20,543,642.64	19,253,241.94	47,867.00	44,361,242.64
12	N. Y., N. Haven & H'fd.,	4,300,000.00	4,300,000.00	3,284,581.60	2,065,719.44	9,494,018.25	8,544,955.34	15,229.32	47,436,918.25
13	Norwich & Worcester,	400,000.00	400,000.00	{ *323,500.00 350,000.00 }	{ 4,870,518.25 3,894,955.34 }	967,460.33	807,884.33	6,045.95	3,743,260.33
14	Phila., Read. & N. Eng.,	10,100,000.00	10,100,000.00	567,460.33	407,884.33	10,828,949.30	10,960,473.20	175,347.00	17,428,949.30
15	Ridgefield & New York,	.....	.....	728,949.30	860,473.20	.....	.....	.....	251,800.00
16	Shepaug, Litchf'd & Nthn.	.....	.....	4,409.65	5,965.67	4,409.65	5,965.67	.....	604,409.65
17	Shore Line,	200,000.00	200,000.00	1,000.00	.....	201,000.00	200,000.00	4,121.16	1,201,000.00
18	South Manchester,	.....	.....	12,568.52	13,415.55	12,568.52	13,415.55	.....	52,568.52
Total,		\$44,414,061.04	\$44,569,423.38	\$9,839,915.81	\$7,673,405.19	54,253,976.85	52,262,828.57	30,385.42	144,260,817.73

* Deferred liability.

TABLE V.—PROPERTY ACCOUNTS.

Number.	RAILROADS.	31 Cost of Road.	32 Cost of Equipment.	33 Bonds and Stocks.	34 Other Permanent Investments.	35 Cash and Current Assets.	36 Other Assets.	37 Total.	38 Cost of Road Per Mile.
1	Boston & New York Air Line,	\$4,437,147.83	\$129,931.94	\$39,859.79	.....	\$660.83	.....	\$4,607,600.39	\$89,467.97
2	Colchester,	50,000 00	.....	.....	.....	.....	.....	50,000 00	13,927.57
3	Danbury & Norwalk,	1,170,270.83	228,971.89	.....	.....	.....	.....	1,399,242.72	32,327.92
4	Hartford & Conn. Western, ..	2,921,747.46	373,867.97	37,672.58	\$99,099.47	.....	.....	3,432,387.48	26,621.84
5	Housatonic,	5,203,645.91	1,581,536.15	.....	178,481.32	.....	.....	6,963,663.38	57,741.30
6	Meriden, Waterbury & Conn. R.,	934,000.00	.....	.....	.....	22,500.00	.....	956,500.00	30,784.43
7	Naugatuck,	2,024,697.45	297,086.57	.....	101,500.00	.....	.....	2,423,284.02	35,803.67
8	New Haven & Derby,	1,559,391.10	200,675.62	.....	.....	.....	.....	1,760,066.72	93,432.61
9	New Haven & Northampton, ..	5,731,586.62	850,430.62	21,000 00	.....	973.29	\$225,000 00	6,828,990.53	45,380.00
10	New London Northern,	2,978,951.51	248,420.44	150,000.00	93,170.00	74,725.92	27,095.37	3,572,363.04	24,619.43
11	New York & New England,	35,015,147.79	5,334,767.83	.....	.....	1,304,298.95	357,901.93	42,012,116.50	97,113.23
12	N. Y., N. H. & Hartford,	39,602,154.12	5,503,793.95	2,219,030.85	8,767,900.00	3,617,881.70	2,850,504.08	62,561,264.70	140,259.09
13	Norwich & Worcester,	3,619,036.00	179,750.67	495,575.00	3,107.08	304,893.68	42,478.62	4,644,841.05	54,701.27
14	Phila., Read., & New Eng., ..	15,807,552.95	427,093.89	900,063.00	.....	75,548.68	51,223.37	17,261,481.39	274,436.68
15	Ridgefield & New York,	220,860.16	.....	.....	.....	.....	.....	220,860.16	7,253.18
16	Shepaug, Litch. & Northern, ..	605,118.78	45,421.27	.....	.....	9,297.54	.....	659,837.59	18,745.93
17	Shore Line,	1,169,496.10	.....	.....	.....	85.47	.....	169,581.57	24,128.38
18	South Manchester,	80,838.00	25,817.92	.....	.....	.....	3,087.95	109,743.87	35,928.00
	Total,	\$123,131,642.61	\$15,427,566.73	\$3,863,201.22	\$9,243,257.87	\$5,410,865.86	\$3,557,291.32	\$159,633,825.61	\$80,653.74

TABLE VI. — EARNINGS.

Number.	RAILROADS.	Gross.				Net.			
		39 Total.	40 Total per last report.	41 Per mile of road operated.	42 Per mile run.	43 Total.	44 Total per last report.	45 Per mile of road operated.	46 Per mile run.
1	Boston & N. Y. Air Line,*	.....	.....	.....	.....	.....	.....	.....	.....
2	Colchester,*	.....	.....	.....	.....	.....	.....	.....	.....
3	Danbury & Norwalk,*	.....	.....	.....	.....	.....	.....	.....	.....
4	Hartford & Conn. Western,	.....	.....	.....	.....	.....	.....	.....	.....
5	Housatonic,*	.....	.....	.....	.....	.....	.....	.....	.....
6	Mer. Wat'ry & Conn. Riv.,†	.....	.....	.....	.....	.....	.....	.....	.....
7	Naugatuck,*	.....	.....	.....	.....	.....	.....	.....	.....
8	New Haven & Derby,*	.....	.....	.....	.....	.....	.....	.....	.....
9	New Haven & Northamp'n,*	.....	.....	.....	.....	.....	.....	.....	.....
10	New London Northern,.....	\$604,344.84	\$698,055.32	\$6,043.44	\$1,2626	\$191,663.22	\$215,200.91	\$1,916.63	\$0.247
11	New York & New England,	5,393,895.56	6,413,061.55	9,893.61	1,21341	1,278,884.18	1,900,773.03	2,345.76	.288
12	N. Y., N. H. & Hartford,	25,576,884.60	18,113,474.38	17,407.76	1,73907	7,644,175.12	5,707,540.11	5,202.66	.520
13	Norwich & Worcester,†	.....	.....	.....	.....	.....	.....	.....	.....
14	Phila., Read. & New Eng.,	781,068.71	1,023,218.08	3,560.28	.90577	12,687.57	34,355.64	700.97	.144
15	Ridgefield & New York,.....	.....	.....	.....	.....	.....	.....	.....	.....
16	Shepang, Litchfd & No'h'n,	73,236.24	69,474.16	1,915.46	1.00820	962.99	3,338.87	25.19	.014
17	Shore Line,*	.....	.....	.....	.....	.....	.....	.....	.....
18	South Manchester,.....	14,893.43	19,932.05	6,619.30	.77690	419.74	2,039.75	185.55	.219
	Total,.....	\$32,444,313.38	\$26,337,215.54	\$13,889.13	\$1.58803	\$9,123,792.82	\$7,863,248.31	\$3,907.96	\$0.447

* Included in N. Y., N. H. & H. R. R. Co.

† Included in N. Y. & N. E. R. R. Co.

TABLE VII.

Number.	RAILROADS.	DIVIDENDS.					51 Paid for taxes.	52 Paid for interest.	53 Paid for insurance.
		47 Total Amount paid.	48 Total per last report.	49 Capital Stock on which Dividends were paid.	50 Capital Stock on which no Divi- dends were paid.				
1	Boston & New York Air Line,...	\$119,940.00	\$119,940.00	\$2,998,500.00	\$865,140.88	.....	.....	\$26,750.00	.....
2	Colechester,.....	.....	.....	.....	25,000.00	.....	.....	.....	.....
3	Danbury & Norwalk,.....	30,000.00	30,000.00	600,000.00	.....	.....	.....	33,500.00	.....
4	Hartford & Connecticut Western,	53,983.00	53,845.00	2,700,200.00	.....	.....	.....	35,000.00	.....
5	Housatonic,.....	28,756.00	28,756.00	2,875,600.00	2,875,600.00	.....	.....	149,000.00	.....
6	Meriden, Waterbury & Conn. R.,	.....	.....	.....	484,000.00	.....	.....	22,500.00	.....
7	Naugatuck,.....	200,000.00	200,000.00	2,000,000.00	.....	.....	.....	6,000.00	.....
8	New Haven & Derby,.....	13,410.00	13,410.00	447,000.00	.....	.....	.....	73,300.00	.....
9	New Haven & Northampton, ...	73,800.00	49,200.00	2,460,000.00	.....	.....	.....	233,000.00	.....
10	New London Northern,.....	127,500.00	120,000.00	1,500,000.00	.....	.....	.....	.....	.....
11	New York & New England,.....	.....	.....	.....	23,817,600.00	.....	\$31,616.64	68,120.00	\$2,291.78
12	N. Y., New Haven & Hartford, ..	3,631,292.50	2,945,535.00	37,942,900.00	.....	.....	262,476.90	426,650.50	29,857.65
13	Norwich & Worcester,.....	231,392.00	216,232.00	2,769,200.00	.....	.....	1,409,459.61	202,000.00	32,594.81
14	Philadelphia, Reading & N. E.,...	.....	.....	.....	6,600.00	.....	29,083.87	24,000.00	.....
15	Ridgfield & New York,.....	.....	.....	.....	6,600,000.00	.....	.....	.....	895.01
16	Shepaug, Litchfield & Northern,...	.....	.....	.....	251,800.00	.....	.....	.....	320.68
17	Shore Line,.....	72,500.00	80,000.00	1,000,000.00	600,000.00	.....	607.40	17,000.00	.....
18	South Manchester,.....	.....	.....	.....	40,000.00	.....	294.16	.....	45.57
Total,.....		\$4,572,573.50	\$3,856,918.00	\$57,293,400.00	\$35,565,740.88	.....	\$1,733,538.58	\$1,316,820.50	\$66,005.50

TABLE VIII.—OPERATING EXPENSES.

Number.	RAILROADS.	54 Maintenance of Way and Structures.	55 Maintenance of Equipment.	56 Conducting Transportation.	57 General Expenses.	58 Total.	59 Total miles operated.	60 Per mile of road operated.	61 Per mile run.
1	Boston & N. Y. Air Line,								
2	Colchester,								
3	Danbury & Norwalk,								
4	Hartford & Conn. Western,								
5	Housatonic,								
6	Mer. Wat. & Conn. River,								
7	Naugatuck,								
8	New Haven & Derby,								
9	New Haven & Northamp.,								
10	New London Northern,	\$57,899.08	\$36,610.92	\$295,024.88	\$23,146.74	\$412,681.62	100.00	\$4,126.81	
11	New York & New England,	610,860.23	482,109.27	2,561,766.77	460,275.11	4,115,011.38	545.19	7,547.85	0.92571
12	N. Y., N. H. & Hartford,	3,122,729.22	2,144,902.34	11,452,663.47	1,212,414.45	17,932,709.48	1,469.28	12,205.10	1.21931
13	Norwich & Worcester,								
14	Phila., Read. & N. E.,	144,791.22	119,649.01	445,967.98	57,972.93	768,381.14	181.00	4,245.20	0.81071
15	Ridgefield & New York,								
16	Shepang, Litch. & North,	41,014.68	4,736.90	20,738.89	5,782.78	72,263.25	38.23	1,890.22	1.05415
17	Shore Line,								
18	South Manchester,	3,824.26	862.27	7,336.78	2,450.38	14,473.69	2.25	6,432.75	0.75403
	Total,	\$3,981,118.69	\$2,788,860.71	\$14,783,498.77	\$1,762,042.39	\$23,315,520.56	2,335.95	\$9,981.17	\$1.14120

TABLE IX. — MAINTENANCE OF WAY AND STRUCTURES.

Number.	RAILROADS.	62 Repairs of road- bed and track.	63 Repairs of bridges and culverts.	64 Repairs of buildings.	65 Miscellaneous.	66 Total.	67 Per mile of road operated.	68 Per mile run.
1	Boston & New York Air Line,							
2	Colechester,							
3	Danbury & Norwalk,							
4	Hartford & Conn. Western,							
5	Housatonic,							
6	Meriden, Wat. & Conn. River,							
7	Naugatuck,							
8	New Haven & Derby,							
9	New Haven & Northampton,							
10	New London Northern,	\$40,865.61	\$3,709.98	\$2,678.57	\$10,645.52	\$57,899.08	\$578.99	\$0.075
11	New York & New England,	469,447.69	72,221.05	45,724.45	23,466.44	610,860.23	1,120.45	.106
12	N. Y., N. H. & Hartford,	2,415,872.92	225,978.99	342,477.54	138,400.37	3,122,729.22	2,125.35	.164
13	Norwich & Worcester,							
14	Phila., Reading & N. England,	101,812.69	21,697.87	10,921.73	10,358.93	144,791.22	799.95	.142
15	Ridgefield & New York,							
16	Shepaug, Litchfield & North'n,	30,283.45	9,998.36	342.30	390.57	41,014.68	1,072.84	.547
17	Shore Line,							
18	South Manchester,	3,410.69	40.70	350.40	10.38	3,824.26	1,699.67	.199
	Total,	\$3,061,693.05	\$333,646.95	\$402,501.08	\$183,278.21	\$3,981,118.69	\$1,704.28	\$0.150

TABLE X.—MAINTENANCE OF EQUIPMENT.

Number.	RAILROADS.	REPAIRS AND RENEWALS.				72	73	74	75	76
		69	70	71						
		Locomotives.	Passenger Cars.	Freight Cars.	Shop machinery, tools, etc.	Other expenses.	Total.	Per mile of road opened.	Per mile run.	
1	Boston & N. Y. Air Line,...									
2	Colchester,									
3	Danbury & Norwalk,									
4	Hartford & Conn. Western,									
5	Housatonic,									
6	Meriden, Wat. & Conn. Riv.,									
7	Naugatuck,									
8	New Haven & Derby,									
9	New Haven & Northampton,									
10	New London Northern,	\$14,963.32	\$4,732.40	\$11,040.67	\$1,601.82	\$4,272.71	\$36,610.92	\$366.10	\$0.047	
11	New York & New England, ..	190,309.61	67,317.22	185,951.56	13,013.65	25,517.23	482,109.27	884.30	.084	
12	N. Y., N. H. & Hartford,	586,204.94	664,157.26	632,262.66	103,345.47	158,932.01	2,144,902.34	1,459.83	.113	
13	Norwich & Worcester,									
14	Phil., Read. & N. E. R. R., ..	64,884.42	11,049.00	33,460.16	1,865.35	8,390.08	119,649.01	661.04	.117	
15	Ridgefield & New York,									
16	Shepaug, Litch. & Northern, ..	1,707.33	2,005.88	991.13	22.56		4,726.90	123.64	.063	
17	Shore Line,									
18	South Manchester,	234.56	593.47		14.24	20.00	862.27	383.23	0.45	
	Total,	\$858,304.18	\$749,855.23	\$863,706.18	\$119,863.09	\$197,132.03	\$2,788,860.71	\$1,197.39	\$0.105	

TABLE XI. — EXPENSES OF TRANSPORTATION.

Number.	RAILROADS.	WAGES.				80 Fuel for Locomotives.	81 Injuries to Persons.	82 Damages or Loss of Property.	83 Other Expenses.	84 Total.
		77 Trainmen.	78 Switchmen, Flagmen, and Watchmen.	79 Station Agents, Clerks, and Laborers.						
1	Boston & N. Y. Air Line.									
2	Colchester.									
3	Danbury & Norwalk.									
4	Hartford & Conn. Western.									
5	Housatonic.									
6	Meriden, Wat. & Conn. R.									
7	Naugatuck.									
8	New Haven & Derby.									
9	New Haven & Northam.									
10	New London Northern.	\$79,108.73	\$4,106.61	\$63,731.17	\$80,547.35	\$4,030.21	\$2,905.45	\$60,595.36	\$295,024.88	
11	New York & N. England.	753,394.26	210,310.03	508,756.79	611,604.63	29,119.70	20,076.11	428,505.25	2,561,766.77	
12	N. Y., N. H. & Hartford.	3,295,054.50	721,278.69	2,846,965.07	1,970,207.13	153,573.65	77,682.34	2,387,902.09	11,452,663.47	
13	Norwich & Worcester.									
14	P., R. & New England.	149,695.57	11,285.97	56,762.40	124,823.30	208.43	381.17	102,811.14	445,967.98	
15	Ridgefield & New York.									
16	Shep'g, Litch. & Northern.	9,271.59		4,093.45	5,675.06		254.24	1,444.55	20,738.89	
17	Shore Line.									
18	South Manchester.	3,667.50	546.00	1,248.00	1,235.92				639.36	7,336.78
	Total.	\$4,290,192.15	\$947,527.30	\$3,481,556.88	\$2,794,093.39	\$186,931.99	\$101,289.31	\$2,981,897.75	\$14,783,498.77	

TABLE XII. — PASSENGER TRAFFIC.

Number.	RAILROADS.	TRANSPORTATION.			88 Average distance carried.	89 Total passenger revenue.	90 Average amount received from each pas- senger.	91 Average receipts per passenger per mile.	92 Passenger earnings per mile of road.	93 Passenger earnings per train mile.
		85 Passengers carried.	86 Same per last report.	87 Passengers carried one mile						
1	Boston & New York Air Line,									
2	Colchester,									
3	Danbury & Norwalk,									
4	Hartford & Connecticut Western,									
5	Housatonic,									
6	Mentden, Waterbury & Conn. River,									
7	Naugatuck,									
8	New Haven & Derby,									
9	New Haven & Northampton,									
10	New London & Northampton,	615,349	698,020	8,701,798	14.00	\$214,636.73	34.800	\$.02466	\$2,467.89	\$0.00958
11	New York & Northern,	8,146,122	9,124,510	95,523,409	11.726	1,871,186.67	22.970	.01959	3,842.85	.97586
12	New York & New England,	44,448,324	33,187,894	725,250,069	16.32	12,971,056.56	29.183	.01788	10,112.66	1.48721
13	Norwich & Worcester,									
14	Philadelphia, Read. & New England,	427,274	398,135	9,577,732	22.41	206,905.61	48.425	.02160	1,365.88	.71925
15	Ridgely & New York,	29,042	32,440	657,197	22.63	24,542.55	84.507	.03734	704.51	.60085
16	Shepaug, Litchfield & Northern,									
17	Shore Line,	109,834	169,420	247,126	2.25	7,843.01	7.141	.03174	3,540.53	.45981
18	South Manchester,									
	Total,	53,775,945	33,611,019	839,957,331	15.62	\$15,296,761.14	28.45	.01821	\$6,548.42	\$1.36590

TABLE XIII.—FREIGHT TRAFFIC.

Number.	RAILROADS.	TRANSPORTATION.				97	98	99	100	101	102
		94	95	96							
		Total tons carried.	Same per last report.	Tons carried one mile.	Average distance hauled of one ton.	Total freight revenue.	Average amount received for each ton of freight.	Average receipts per ton per mile.	Freight earnings per mile of road.	Freight earnings per train mile.	
1	Boston & New York Air Line,.....										
2	Colchester,.....										
3	Danbury & Norwalk,.....										
4	Hartford & Connecticut Western,.....										
5	Housatonic,.....										
6	Meriden, Waterbury & Conn. River,.....										
7	Naugatuck,.....										
8	New Haven & Derby,.....										
9	New Haven & Northampton,.....										
10	New London Northern,.....	559,852	634,142	27,870,245	49.07	\$357,555.95	.63080	\$.00128	\$3,575.85	\$1.61700	
11	New York & New England,.....	2,991,312	3,540,011	290,492,309	97.11	3,125,554.27	1.04487	.01076	5,398.03	1.39909	
12	New York, New Haven & Hartford,.....	8,717,879	6,869,100	541,484,407	62.11	10,091,082.33	1.15752	.01864	7,094.32	2.21000	
13	Norwich & Worcester,.....										
14	Philadelphia, Read. & New England,.....	789,377	1,012,116	60,274,089	76.35	527,374.22	.66869	.00575	2,913.67	.97526	
15	Ridgely & New York,.....										
16	Shepaug, Litchfield & Northern,.....	40,549	38,546	840,512	20.73	43,871.21	1.08193	.05220	1,147.56	1.80362	
17	Shore Line,.....										
18	South Manchester,.....	23,651	28,825	53,215	2.25	6,927.12	.29289	.13017	3,078.72	3.70434	
	Total,.....	13,122,050	12,121,740	921,014,777	70.18	\$14,152,305.10	1.12653	\$0.15846	\$6,058.50	\$1.80055	

TABLE XIV.—FUEL FOR LOCOMOTIVES.

Number.	RAILROADS.	COAL.		WOOD.		107 Total tons fuel consumed.	108 Total cost.	109 Total miles run.	110 Average pounds consumed per mile.
		103 Number of tons.	104 Average cost per ton.	105 Number of cords.	106 Average cost per cord.				
1	Boston & New York Air Line,								
2	Colchester,								
3	Danbury & Norwalk,								
4	Hartford & Connecticut Western,								
5	Housatonic,								
6	Meriden, Waterbury & Conn. River,								
7	Naugatuck,								
8	New Haven & Derby,								
9	New Haven & Northampton,								
10	New London Northern,	26,849	\$3.00			26,849.00	80,547	674,933	79.00
11	New York & New England,	231,941.10	2.66			231,941.10	616,963.33	5,746,432	80.73
12	New York, New Haven & Hartford,	650,870	2.93	1,289	\$2.11	651,561.00	1,907,430.11	19,285,689	67.57
13	Norwich & Worcester,	37,265	2.62	94	3.00	37,312	98,052.85	817,215	91.31
14	Phila., Read. & New England,								
15	Ridgefield & New York,								
16	Shepaug, Litchfield & Northern,	1,703.56	3.25	14.50	2.75	1,713.22	5,576.20	74,991	45.69
17	Shore Line,								
18	South Manchester,	275	5.00			275	1,375.00	19,195	28.65
	Total,	948,903.66	\$2.85	1,397.50	\$2.18	949,651.32	\$2,709,944.49	26,618,455	71.35

TABLE XV. — MILEAGE AND EMPLOYES.

Number.	RAILROADS.	111 Passenger trains.	112 Freight trains.	113 Other trains.	114 Total.	115 Total per last report.	116 Employees, including officers.	117 Same per last report.
1	Boston & New York Air Line,...	.....	.....	.....	.....	.....	.....	.....
2	Colchester,.....	.....	.....	.....	.....	.....	.....	.....
3	Danbury & Norwalk,.....	.....	.....	.....	.....	.....	.....	.....
4	Hartford & Connecticut Western,.....	.....	.....	.....	.....	.....	.....	.....
5	Housatonic,.....	.....	.....	.....	.....	.....	.....	.....
6	Meriden, Waterbury & Conn. River,...	.....	.....	.....	.....	.....	.....	.....
7	Naugatuck,.....	.....	.....	.....	.....	.....	.....	.....
8	New Haven & Derby,.....	.....	.....	.....	.....	.....	.....	.....
9	New Haven & Northampton,.....	.....	.....	.....	.....	.....	.....	.....
10	New London Northern,.....	257,894	221,042	296,297	775,233	742,862	452	640
11	New York & New England,.....	2,131,537	2,252,201	1,362,694	5,746,432	6,131,634	4,057	4,576
12	New York, New Haven & Hartford,...	9,951,315	4,598,293	4,488,271	19,032,879	13,202,473	19,337	14,037
13	Norwich & Worcester,.....	.....	.....	.....	.....	.....	.....	.....
14	Philadelphia, Reading & New England,	339,253	527,335	155,705	1,022,293	1,457,839	541	1,066
15	Ridgefield & New York,.....	.....	.....	.....	.....	.....	.....	.....
16	Shepaug, Litchfield & Northern, . . .	36,355	710	37,926	74,991	71,243	73	82
17	Shore Line,.....	.....	.....	.....	.....	.....	.....	.....
18	South Manchester,	17,325	1,870	.....	19,195	19,500	14	14
	Total,	12,733,679	7,601,451	6,335,893	26,671,023	21,625,551	24,474	20,415

TABLE XVI. — EQUIPMENT.

Number.	RAILROADS.	LOCOMOTIVES.		CARS.				CARS WITH TRAIN BRAKE.		CARS WITH AUTOMATIC COUPLERS.	
		118 Num- ber.	119 With train brake.	120 Passen- ger ser- vice.	121 Freight and other.	122 Total.	123 Total per last report.	124 In pas- senger ser- vice.	125 In freight service.	126 In pas- senger ser- vice.	127 In freight service.
1	Boston & New York Air Line,.....										
2	Colchester,.....										
3	Danbury & Norwalk,.....										
4	Hartford & Connecticut Western,...										
5	Housatonic,.....										
6	Meriden, Waterbury & Conn. River,										
7	Naugatuck,.....										
8	New Haven & Derby,.....										
9	New Haven & Northampton,.....										
10	New London Northern,.....	25	16	22	410	432	377	22		22	
11	New York & New England,.....	212	154	279	6,360	6,639	5,584	279	164	279	1,189
12	New York, New Haven & Hartford,	669	570	1,625	11,949	13,574	9,228	1,625	1,389	1,625	3,045
13	Norwich & Worcester,.....										
14	Phil., Reading & N. E. R. R.,.....	39	33	27	611	638	545	27		27	100
15	Ridgefield & New York,.....										
16	Shepaug, Litchfield & Northern,....	4	4	6	42	48	49	6	4	6	4
17	Shore Line,.....										
18	South Manchester,.....	2	2	4		4	4	4		4	
	Total,.....	951	779	1,963	19,372	21,335	15,787	1,963	1,557	1,963	4,338

TABLE XVII.

Number.	RAILROADS.	STATIONS.			RAILS.		New ties laid during the year.	HIGHWAY GRADE CROSSINGS IN CON-NECTICUT.	
		128 On main line and branches.	129 In Conn.	130 Average num-ber of miles for each station in Conn.	131 Miles of steel.	132 Miles of iron.		133	134 At grade.
1	Boston & New York Air Line,	16	16	3.22	60.66	4.00	47	47
2	Colchester,	1	1	3.59	3.80	.69	.....	2	2
3	Danbury & Norwalk,	17	17	1.78	43.11	3.26	.....	61	61
4	Hartford & Connecticut Western,	40	27	2.49	106.15	4.85	.....	.....	.....
5	Housatonic,	38	23	3.92	104.22	2.85	.....	128	128
6	Meriden, Waterbury & Conn. River,	15	15	2.02	37.48	.....	.....	15	15
7	Naugatuck,	21	21	2.90	83.20	2.55	.....	54	54
8	New Haven & Derby,	6	6	2.78	25.14	.33	.....	13	13
9	New Haven & Northampton,	38	19	3.44	84.90	2.85	.....	79	79
10	New London Northern,	43	25	2.24	126.50	33.07	37,000	44	44
11	New York & New England,	202	77	2.72	448.44	70.06	297,485	223	223
12	New York, New Haven & Hartford,	141	81	3.31	2,488.11	205.64	925,498	228	*247
13	Norwich & Worcester,	26	16	3.06	75.90	13.79	.....	39	39
14	Philadelphia, Reading & New England,	68	29	2.66	91.30	25.10	39,246	71	72
15	Ridgely & New York, .....	.....	.....	.....	.....	.....	.....	.....	.....
16	Shepaug, Litchfield & Northern,	14	14	3.18	37.90	4.47	14,570	52	52
17	Shore Line,	22	22	2.21	98.18	9.32	.....	29	35
18	South Manchester,	1	1	2.25	2.25	1.72	547	3	3
	Total,	709	410	3.29	3,917.24	384.55	1,314,346	1,088	1,114

* By error number of crossings at grade on N. Y., N. H. & H. R. R. was reported last year as 247. It should have been 248, making total 1,115.

TABLE XVIII. — GENERAL PERCENTAGE

Number.	RAILROADS.	136 Gross earnings to capital and debt.	137 Net earnings to capital and debt.	138 Net earnings to permanent investments.	139 Net earnings to gross earnings.	140 Operating expense to gross earnings.	141 Passenger revenue to gross earnings.	142 Freight revenue to gross earnings.
1	Boston & New York Air Line,.....							
2	Colchester,.....							
3	Danbury & Norwalk,.....							
4	Hartford & Connecticut Western,.....							
5	Housatonic,.....							
6	Meriden, Waterbury & Conn. River, ..							
7	Naugatuck,.....							
8	New Haven & Derby,.....							
9	New Haven & Northampton,.....							
10	New London Northern,.....	20.13	6.38	5.52	31.71	68.29	35.51	59.16
11	New York & New England,.....	10.23	2.92	3.17	23.71	76.29	34.69	57.94
12	New York, New Haven & Hartford, ..	53.92	16.11	13.63	29.89	70.01	50.89	39.45
13	Norwich & Worcester,.....							
14	Phil., Reading & N. E. R.,.....	44.24	7.27	.74	16.24	98.38	26.49	67.52
15	Ridgefield & New York,.....							
16	Shepaug, Litchfield & Northern,.....	12.12	.16	1.48	1.31	98.68	33.52	59.91
17	Shore Line,.....							
18	South Manchester,.....	28.33	.80	3.94	2.82	97.18	52.68	46.51
	Total,.....	22.49	6.33	7.69	28.14	71.86	47.15	43.62

TABLE XIX. — ACCIDENTS IN CONNECTICUT RESULTING IN DEATH OR INJURY TO PERSONS.

Number.	GENERAL STATEMENT.						HIGHWAY CROSSINGS.		EMPLOYERS.					PAS- SENGERS.		THIR- D PARTIES.		OTHERS.	
	Passengers.	Employees.	Trespassers.	Others.	Total.	Fatal.	Not fatal.	Fatal.	Not fatal.	Falling from engine or car.	Coupling or un- coupling.	Overhead obstruc- tions.	Other causes.	Fatal.	Not fatal.	Fatal.	Not fatal.	Fatal.	Not fatal.
1	143	144	145	146	147	148	149	150	151										
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
	12	104	175	22	408	184	269	10	12	42	91	18	48	28	171	2	10	101	74
																		8	14

RAILROADS.

1 Boston & New York Air Line.
 2 Colchester.
 3 Danbury & Norwalk.
 4 Hartford & Connecticut Western.
 5 Housatonic.
 6 Meriden.
 7 Meriden, Waterbury & Conn. River.
 8 Naugatuck.
 9 New Haven & Derby.
 10 New Haven & Northampton.
 11 New London & Northern.
 12 New York & New England.
 13 New York & New Haven & Hartford.
 14 Norwich & Worcester.
 15 Philadelphia, Reading & New England.
 16 Ridgefield & New York.
 17 Shore Line.
 18 South Manchester.

Total.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	CAPITAL STOCK.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,.....	\$3,862,230.88	\$3,862,230.88	\$3,862,730.88	\$3,863,630.88	\$3,863,640.88
2	Central New England & Western,.....	1,600,000.00	1,600,000.00	1,600,000.00	1,600,000.00	1,600,000.00
3	Colchester,.....	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00
4	Danbury & Norwalk,.....	600,000.00	600,000.00	600,000.00	600,000.00	600,000.00
5	Hartford & Connecticut Valley,.....	800,000.00	800,000.00	800,000.00	800,000.00	800,000.00
6	Hartford & Connecticut Western,.....	2,668,700.00	2,670,200.00	2,683,100.00	2,683,100.00	2,683,100.00
7	Housatonic,.....	2,904,500.00	2,902,800.00	2,902,800.00	2,902,800.00	2,902,800.00
8	Meriden, Waterbury & Conn. River,...	500,000.00	500,000.00	500,000.00	500,000.00	500,000.00
9	Naugatuck,.....	2,000,000.00	2,000,000.00	2,000,000.00	2,000,000.00	2,000,000.00
10	New Haven & Derby,.....	447,000.00	447,000.00	447,000.00	447,000.00	447,000.00
11	New Haven & Northampton,.....	2,460,000.00	2,460,000.00	2,460,000.00	2,460,000.00	2,460,000.00
12	New London Northern,.....	1,500,000.00	1,500,000.00	1,500,000.00	1,500,000.00	1,500,000.00
13	New York & New England,.....	22,700,000.00	22,700,000.00	23,665,000.00	23,665,000.00	23,665,000.00
14	New York, New Haven & Hartford,...	18,600,000.00	18,700,000.00	23,375,000.00	23,375,000.00	23,375,000.00
15	New York, Providence & Boston,...	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00
16	Norwich & Worcester,.....	2,626,900.00	2,626,900.00	2,646,900.00	2,646,900.00	2,646,900.00
17	Phila., Reading & New England,.....	251,800.00	251,800.00	251,800.00	251,800.00	251,800.00
18	Ridgefield & New York,.....	599,400.00	599,400.00	599,400.00	599,400.00	599,400.00
19	Rockville,.....	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00	1,000,000.00
20	Shepaug, Litchfield & Northern,...	40,000.00	40,000.00	40,000.00	40,000.00	40,000.00
21	Shore Line,.....	99,877.46	99,877.46	99,877.46	99,877.46	99,877.46
22	South Manchester,.....	118,200.00	118,200.00	118,200.00	118,200.00	118,200.00
23	Stamford & New Canaan,.....					
24	Watertown & Waterbury,.....					
	Total,.....	\$70,404,108.34	\$70,286,430.88	\$75,359,330.88	\$84,997,130.88	\$90,006,840.88

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	FUNDED DEBT.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,.....	\$500,000.00	\$500,000.00	\$500,000.00	\$500,000.00	\$500,000.00
2	Central New England & Western,....	2,500,000.00	2,500,000.00	3,950,000.00	.....	.....
3	Colchester,.....	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00
4	Danbury & Norwalk,.....	650,000.00	650,000.00	650,000.00	650,000.00	650,000.00
5	Hartford & Connecticut Valley,.....	.....	.....	.....	.....	.....
6	Hartford & Connecticut Western,....	608,000.00	700,000.00	700,000.00	700,000.00	700,000.00
7	Housatonic,.....	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00	3,000,000.00
8	Meriden, Waterbury & Conn. River,...	400,000.00	400,000.00	1,000,000.00	450,000.00	450,000.00
9	Naugatuck,.....	150,000.00	150,000.00	150,000.00	150,000.00	150,000.00
10	New Haven & Derby,.....	1,576,900.88	1,576,900.88	1,576,900.88	1,576,900.88	1,280,000.00
11	New Haven & Northampton,.....	3,900,000.00	3,900,000.00	3,900,000.00	3,900,000.00	3,900,000.00
12	New London Northern,.....	1,499,500.00	1,499,500.00	1,500,000.00	1,500,000.00	1,500,000.00
13	New York & New England,.....	16,748,625.00	17,209,535.00	17,218,835.00	17,187,522.50	17,259,061.04
14	New York & New Haven & Hartford,...	2,000,000.90	2,000,000.00	2,000,000.00	4,300,000.00	4,300,000.00
15	New York, Providence & Boston,....	1,300,000.00	1,300,000.00	2,300,000.00	.....	.....
16	Norwich & Worcester,.....	400,000.00	400,000.00	400,000.00	400,000.00	400,000.00
17	Phila., Reading & New England,....	.....	.....	.....	10,100,000.00	10,100,000.00
18	Ridgefield & New York,.....	.....	.....	.....	.....	.....
19	Shepaug, Litchfield & Northern,....	.....	.....	.....	.....	.....
20	Shore Line,.....	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00
21	South Manchester,.....	.....	.....	.....	.....	.....
22	Stamford & New Canaan,.....	.....	.....	.....	.....	.....
23	Watertown & Waterbury,.....	19,000.00	.....	.....	.....	.....
	Total,	\$35,477,025.88	\$36,010,935.88	\$39,070,735.88	\$44,589,423.38	\$44,414,001.04

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	FLOATING DEBT.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,.....					
2	Central New England & Western,....	\$734,711.57	\$949,186.24	\$289,220.22		
3	Colchester,.....					
4	Danbury & Norwalk,.....	50,000.00	50,000.00	50,000.00	\$50,000.00	
5	Hartford & Connecticut Valley,....					
6	Hartford & Connecticut Western,....					
7	Housatonic,.....	613,424.60	22,697.99	22,697.99	22,697.99	22,697.99
8	Meriden, Waterbury & Conn. River, ..	757,462.45	741,790.89	905,618.82		
9	Naugatuck,.....		872,871.39	88,637.12		
10	New Haven & Derby,.....					
11	New Haven & Northampton,.....	50.00				
12	New London Northern,.....	115,956.92	104,583.67	40,553.52	2,293.67	1,730.17
13	New York & New England,.....	1,055,097.47	1,718,708.02	1,640,664.47	2,065,719.44	3,284,581.60
14	New York, New Haven & Hartford, ..	1,638,740.99	4,034,692.68	721,407.29	4,244,955.34	5,194,018.25
15	New York, Providence & Boston,....	599,102.91	860,721.43	1,508,880.42		
16	Norwich & Worcester,.....	445,149.63	415,903.67	416,627.00	407,884.33	567,460.33
17	Phila., Reading & New England,.....				860,473.20	728,949.30
18	Ridgefield & New York,.....					
19	Rockville,.....					
20	Shepaug, Litchfield & Northern,	5,060.47	9,977.50	8,841.43	5,965.67	4,409.65
21	Shore Line,.....					1,000.00
22	South Manchester,.....	19,419.97	15,388.35	15,355.52	13,415.55	12,568.52
23	Stamford & New Canaan,.....					
24	Watertown & Waterbury,.....	22,520.00				
	Total,.....	\$6,056,696.98	\$9,792,522.43	\$5,708,503.80	\$7,673,405.19	\$9,839,915.81

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	PERMANENT INVESTMENTS.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,.....	\$4,566,169.77	\$4,601,492.45	\$4,603,342.45	\$4,604,322.56	\$4,606,939.56
2	Central New England & Western,.....	4,674,581.20	4,856,563.32	5,538,971.80	50,000.00	50,000.00
3	Colchester,.....	50,000.00	50,000.00	50,000.00	1,449,242.72	1,399,242.72
4	Danbury & Norwalk,.....	1,399,242.72	1,449,242.72	1,449,242.72	881,246.30	.....
5	Hartford & Connecticut Valley,.....	896,647.07	896,647.07	881,246.30	3,432,387.48	3,432,387.48
6	Hartford & Connecticut Western,.....	3,486,714.90	3,432,387.48	3,432,387.48	6,963,663.38	6,963,663.38
7	Housatonic,.....	6,715,851.80	6,877,918.73	7,008,802.96	934,000.00	934,000.00
8	Meriden, Waterbury & Conn. River,...	1,538,156.42	1,551,000.72	1,557,792.87	2,423,284.02	2,423,284.02
9	Naugatuck,.....	2,423,284.02	2,423,284.02	2,423,284.02	2,006,967.60	1,760,066.72
10	New Haven & Derby,.....	2,056,967.60	2,056,967.60	2,056,967.60	6,603,017.24	6,603,017.24
11	New Haven & Northampton,.....	6,603,017.24	6,603,017.24	6,603,017.24	3,470,541.95	3,470,541.95
12	New London Northern,.....	3,444,927.16	3,444,927.16	3,444,927.16	40,337,272.19	40,337,272.19
13	New York & New England,.....	38,843,517.24	39,857,142.66	40,108,915.03	46,887,794.36	56,092,878.92
14	New York, New Haven & Hartford,...	24,666,424.38	27,750,791.95	29,671,524.18	4,288,228.40	4,287,468.75
15	New York, Providence & Boston,...	7,575,579.53	7,702,801.03	8,424,756.04	17,079,724.63	17,134,709.84
16	Norwich & Worcester,.....	4,061,599.24	4,054,172.96	4,082,247.93	220,860.16	220,860.16
17	Phila., Reading & New England,...	.....	.....	.....	.....	.....
18	Ridgefield & New York,.....	230,087.35	220,860.16	220,860.16	.....	.....
19	Rockville,.....	.....	.....	.....	.....	.....
20	Shepaug, Litchfield & Northern,...	633,225.70	641,419.11	650,737.90	650,737.90	650,540.05
21	Shore Line,.....	1,169,496.10	1,169,496.10	1,169,496.10	1,169,496.10	1,169,496.10
22	South Manchester,.....	98,915.63	100,911.49	106,622.67	106,622.67	106,655.92
23	Stamford & New Canaan,.....	99,877.46	.....	.....	.....	.....
24	Watertown & Waterbury,.....	134,248.00	.....	.....	.....	.....
Total,.....		\$115,294,378.21	\$119,741,043.97	\$123,545,142.61	\$142,678,103.36	\$151,665,668.43

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	TOTAL GROSS EARNINGS.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line.*					*
2	Central New England & Western,...		\$630,528.87	\$666,358.03		*
3	Colchester.*					*
4	Danbury & Norwalk,*				*	*
5	Hartford & Connecticut Valley.*					*
6	Hartford & Connecticut Western,...	a \$461,260.76				*
7	Housatonic,	1,461,469.41	1,538,412.26	1,586,334.11	*	*
8	Meriden, Waterbury & Conn. River, ..	81,793.07	87,018.45	86,280.99	†	†
9	Naugatuck,*					*
10	New Haven & Derby,	†	†	†	*	*
11	New Haven & Northampton,*					*
12	New London Northern,	608,272.15	599,205.80	658,104.96	\$698,055.32	604,344.84
13	New York & New England,	5,849,691.70	6,149,246.40	6,216,617.26	b 6,413,061.55	5,393,895.56
14	New York, New Haven & Hartford, ..	10,749,167.54	11,323,617.15	11,913,701.08	18,113,474.38	25,576,884.60
15	New York, Providence & Boston,	3,005,234.45	3,051,228.69	3,157,749.65	*	*
16	Norwich & Worcester,†					†
17	Phila., Reading & New England,				1,023,218.08	781,068.71
18	Ridgefield & New York,					
19	Shenepaug, Litchfield & Northern,	63,746.00	63,336.32	65,614.64	69,474.10	73,226.24
20	Shore Line,*					*
21	South Manchester,	18,186.87	19,177.81	19,024.90	19,932.05	14,893.43
	Total,	\$22,298,821.95	\$23,461,771.25	\$24,369,785.62	\$26,337,215.54	\$32,444,313.33

* Included in N. Y., N. H. & H. R. R. Co.

a Includes 10 months for C. N. E. & W. R. R. Co.

† Included in N. Y. & N. H. R. R. Co.

b Includes 10 months for M., W. & C. R. R. Co.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	TOTAL OPERATING EXPENSES.				
		1890	1891	1892	1893	1894
1	Boston & New York Air Line,*					*
2	Central New England & Western,		\$532,511.97	\$600,682.56		*
3	Colchester,*					*
4	Danbury & Norwalk,*				*	*
5	Hartford & Connecticut Valley,*					*
6	Hartford & Connecticut Western,					*
7	Housatonic,*	a \$334,217.58	937,572.95	1,033,280.04	*	*
8	Meriden, Waterbury & Conn. River,	822,756.76	92,594.69	94,713.83	†	†
9	Naugatuck,*	90,743.39				*
10	New Haven & Derby,*	†	†	†	*	*
11	New Haven & Northampton,*					*
12	New London Northern,	406,136.91	421,546.39	417,349.63	\$482,854.41	\$412,681.62
13	New York & New England,	3,782,157.47	4,133,504.59	4,574,750.88	64,512,288.52	4,115,011.38
14	New York, New Haven & Hartford,	7,379,774.49	7,928,901.66	8,273,010.69	12,405,934.27	17,932,709.48
15	New York, Providence & Boston,	1,950,995.00	1,977,932.79	2,031,022.46	*	*
16	Norwich & Worcester,†					†
17	Phila., Reading & New England,				998,862.44	768,381.14
18	Ridgefield & New York					
19	Shepaug, Litchfield & Northern,	43,623.79	55,981.56	59,060.46	66,135.29	72,263.25
20	Shore Line,*					*
21	South Manchester,	13,383.96	11,386.37	13,331.02	17,892.30	14,473.69
	Total,	\$14,823,789.35	\$16,091,932.97	\$17,097,210.57	\$18,473,967.23	\$23,315,520.56

* Included in N. Y., N. H. & H. R. R. Co.

† Included in N. Y. & N. E. R. R. Co.
b Includes 10 months for M., W. & C. R. R. Co.

a Includes ten months for the C. N. E. & W. R. R. Co.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	INCOME FROM PASSENGERS.				
		1890	1891	1892	1893	1894
1	Boston & New York Air Line,*	.....	\$176,017.16	\$166,173.64	.....	*
2	Central New England & Western,.....	.....	.....	.....	.....	*
3	Colchester,*	.....	.....	.....	.....	*
4	Danbury & Norwalk,*	.....	.....	.....	.....	*
5	Hartford & Connecticut Valley,*	.....	.....	.....	.....	*
6	Hartford & Connecticut Western,.....	.....	.....	.....	.....	*
7	Housatonic,.....	<i>a</i> \$151,833.09	560,613.51	592,289.29	*	*
8	Meriden, Waterbury & Conn. River,	511,070.39	18,995.00	18,151.95	†	†
9	Naugatuck,*	22,029.34	.....	.....	.....	*
10	New Haven & Derby,.....	†	†	.....	.....	*
11	New Haven & Northampton,*	.....	.....	.....	.....	*
12	New London Northern,.....	225,129.91	219,035.22	242,880.41	\$255,435.80	\$214,626.73
13	New York & New England,.....	2,004,654.52	2,082,413.55	2,168,173.91	2,120,224.03	1,871,186.67
14	New York, New Haven & Hartford,.....	5,398,010.84	5,780,305.56	6,023,750.83	8,563,340.44	12,971,656.56
15	New York, Providence & Boston,.....	1,395,022.23	1,502,087.04	1,510,469.04	*	*
16	Norwich & Worcester,†	.....	.....	.....	.....	.....
17	Phila., Reading & New England,.....	.....	.....	.....	178,428.92	206,905.61
18	Ridgefield & New York,.....	17,318.18	19,418.18	20,199.90	24,400.86	24,542.56
19	Shepaug, Litchfield & Northern,.....	.....	.....	.....	.....	*
20	Shore Line,*	.....	.....	.....	.....	.....
21	South Manchester,.....	10,762.36	11,364.74	11,459.51	11,517.92	7,843.01
	Total,.....	\$9,735,830.86	\$10,370,249.96	\$10,753,548.48	\$11,153,347.47	\$15,296,761.14

* Included in N. Y., N. H. & H. R. R. Co.

† Included in N. Y. & N. E. R. R. Co.

a Includes ten months for the C. N. E. & W. R. R. Co.
b Includes 10 months for M., W. & C. R. R. Co.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	INCOME FROM FREIGHT.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,*		\$393,911.51	\$458,350.26		*
2	Central New England & Western,					*
3	Colchester,*					*
4	Danbury & Norwalk,*					*
5	Hartford & Connecticut Valley,*					*
6	Hartford & Connecticut Western,					*
7	Housatonic,*	a\$259,675.79				*
8	Meriden, Waterbury & Conn. River,†	812,941.23	852,054.74	872,681.97	*	*
9	Naugatuck,*	55,741.66	63,745.37	63,848.26	†	†
10	New Haven & Derby,*	†	†	†	*	*
11	New Haven & Northampton,*					*
12	New London Northern,	346,156.77	355,686.85	390,805.65	\$415,559.81	\$357,555.95
13	New York & New England,	3,445,384.95	3,666,545.49	3,601,461.58	63,805,674.61	3,125,554.27
14	New York, New Haven & Hartford,	4,489,610.96	4,577,070.51	4,900,936.22	7,825,106.99	10,091,082.33
15	New York, Providence & Boston,	1,490,144.77	1,432,225.34	1,531,905.80	*	*
16	Norwich & Worcester,†					†
17	Philadelphia, Reading & New Eng.,				818,845.26	527,374.22
18	Ridgefield & New York,					*
19	Shepaug, Litchfield & Northern,	42,664.16	39,889.92	40,012.07	40,997.29	43,871.21
20	Shore Line,*					*
21	South Manchester,	7,349.51	7,667.63	7,440.34	8,285.23	6,927.12
	Total,	\$10,949,669.80	\$11,388,797.36	\$11,867,442.15	\$12,914,469.19	\$14,152,365.10

* Included in N. Y., N. H. & H. R. R. Co.

† Included in N. Y. & N. E. R. R. Co.

b Includes 10 months for M., W. & C. R. R. Co.

a Includes 10 months for C. N. E. & W. R. R. Co.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	NUMBER OF PASSENGERS CARRIED.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,*					*
2	Central New England & Western,		396,190	413,827		*
3	Colchester,*					*
4	Danbury & Norwalk,*				*	*
5	Hartford & Connecticut Valley,*					*
6	Hartford & Connecticut Western,	a556,947				*
7	Housatonic,*	1,303,416	1,344,197	1,423,417	*	*
8	Meriden, Waterbury & Conn. River,†	74,433	64,632	61,554	†	†
9	Naugatuck,*					*
10	New Haven & Derby,*	†	†	†	*	*
11	New Haven & Northampton,*					*
12	New London Northern,	540,804	565,754	613,989	698,620	615,349
13	New York & New England,	7,637,290	8,212,400	8,759,010	69,124,510	8,146,122
14	New York, New Haven & Hartford,	13,148,140	14,030,868	14,658,905	23,187,894	44,448,324
15	New York, Providence & Boston,	5,523,931	6,286,856	6,500,351	*	*
16	Norwich & Worcester,†	*	†			†
17	Philadelphia, Reading & New Eng.,				398,135	427,274
18	Ridgefield & New York,	†	†			
19	Shepaug, Litchfield & Northern,	22,250	24,873	26,132	32,440	29,042
20	Shore Line,*					*
21	South Manchester,	154,237	161,642	164,860	169,420	109,834
	Total,	28,771,448	31,087,344	32,521,045	33,611,019	53,775,945

* Included in N. Y., N. H. & H. R. R. Co.

† Included in N. Y. & N. E. R. R. Co.

a Includes ten months for the C. N. E. & W. R. R. Co.
b Includes 10 months for M., W. & C. R. R. Co.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	Tons of Freight Carried.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,*					*
2	Central New England & Western,		522,074	655,391		*
3	Colchester,*	†	†	†	*	*
4	Danbury & Norwalk,†					*
5	Hartford & Connecticut Valley,*					*
6	Hartford & Connecticut Western,	a 305,721				*
7	Housatonic,*	688,817	881,837	935,465	*	*
8	Meriden, Waterbury & Conn. River,†	108,672	130,921	133,578	†	†
9	Naugatuck,*	†			*	*
10	New Haven & Derby,†	†	†	†	*	*
11	New Haven & Northampton,*					*
12	New London Northern,	430,708	400,598	555,879	634,142	559,852
13	New York & New England,	2,973,813	3,299,876	3,272,110.68	b 3,549,011	3,991,342
14	New York, New Haven & Hartford,	3,563,873	3,802,012	4,120,477	6,839,100	8,717,879
15	New York, Providence & Boston,	1,761,012	1,926,958	2,114,961	*	*
16	Norwich & Worcester,†					*
17	Philadelphia, Reading & New Eng.,				1,012,116	789,377
18	Ridgefield & New York,					*
19	Shepaug, Litchfield & Northern,	43,155	40,711	39,886	38,546	40,549
20	Shore Line,*					*
21	South Manchester,	28,426	27,864	24,963	28,825	33,651
	Total,	9,904,197	11,032,851	11,852,710.68	12,121,740	13,122,650

* Included in N. Y., N. H. & H. R. R. Co.

a Includes 10 months for C. N. E. & W. R. R. Co.

† Included in N. Y. & N. E. R. R. Co.

b Includes 10 months for M., W. & C. R. R. Co.

† Included in Housatonic R. R. Co.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	AMOUNT PAID IN DIVIDENDS.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,.....	\$120,015.00	\$119,400 00	\$119,400.00	\$119,940.00	\$119,940.00
2	Central New England & Western,.....					
3	Colchester,.....					
4	Danbury & Norwalk,.....	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00
5	Hartford & Connecticut Valley,.....	32,000.00	32,000.00	32,000.00		
6	Hartford & Connecticut Western,.....					
7	Housatonic,.....		53,404.00	53,662.00	53,845.00	53,983.00
8	Meriden, Waterbury & Conn. River,.....				28,756.00	28,756.00
9	Naugatuck,.....	200,000.00	200,000.00	200,000.00	200,000.00	200,000.00
10	New Haven & Derby,.....	8,940.00	8,940.00	8,940.00	13,410.00	13,410.00
11	New Haven & Northampton,.....	24,600.00	49,200.00	49,200.00	49,200.00	73,800.00
12	New London Northern,.....	105,000.00	105,000.00	108,750.00	120,000.00	127,500.00
13	New York & New England,.....	183,369.26	189,000.00	*243,775.00		
14	New York, New Haven & Hartford,.....	1,705,000.00	1,865,000.00	2,103,750.00		
15	New York, Providence & Boston,.....	425,000.00	500,000.00	500,000.00	2,945,535.00	3,631,292.50
16	Norwich & Worcester,.....	209,774.00	209,624.00	211,224.00		
17	Phila., Reading & New England,.....				216,232.00	221,392.00
18	Ridgefield & New York,.....					
19	Rockville,.....					
20	Shepaug, Litchfield & Northern,.....					
21	Shore Line,.....	72,500.00	72,500.00	72,500.00	80,000.00	72,500.00
22	South Manchester,.....					
23	Stamford & New Canaan,.....	4,000.00				
	Total,.....	\$3,120,198.26	\$3,434,608.00	\$3,733,741.00	\$3,856,918.00	\$4,572,573.50

* Payment of Dividend No. 13, viz., \$128,275.00 on preferred stock of N. Y. & N. E. R. R. due May 1, 1892, was enjoined, and consequently not paid. Amount paid in 1892 should have, therefore, been shown in the above table as \$115,500.00 instead of \$243,775.00, and total dividends paid for that year \$3,605,466.00, instead of \$3,733,741.00.

COMPARATIVE STATEMENT FOR FIVE YEARS.

Number.	RAILROADS.	AMOUNT PAID FOR INTEREST.				
		1890.	1891.	1892.	1893.	1894.
1	Boston & New York Air Line,.....	\$26,750.00	\$26,750.00	\$26,750.00	\$26,750.00	\$26,750.00
2	Central New England & Western,....	125,000.00	125,000.00	725.12		
3	Colchester,.....					
4	Danbury & Norwalk,.....	41,500.00	32,500.00	37,500.00	33,500.00	33,500.00
5	Hartford & Connecticut Valley,....	48.00	48.00	48.00		
6	Hartford & Connecticut Western,....	5,066.66	35,000.00		35,000.00	35,000.00
7	Housatonic,.....	154,648.01	149,000.00	187,851.11	149,000.00	149,000.00
8	Meriden, Waterbury & Conn. River,...	65,132.01		59,449.36	19,166.67	22,500.00
9	Naugatuck,.....	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
10	New Haven & Derby,.....	91,114.05	91,114.05	91,114.05	88,114.05	73,300.00
11	New Haven & Northampton,.....	233,000.00	233,000.00	233,000.00	233,000.00	233,000.00
12	New London Northern,.....	84,963.34	79,725.00	80,929.88	68,120.00	68,120.00
13	New York & New England,.....	1,010,936.93	1,040,021.97	494,966.55	1,093,571.66	436,650.50
14	New York, New Haven & Hartford,...	149,637.78	80,000.00	118,213.83	262,884.75	202,000.00
15	New York, Providence & Boston,...	48,378.97	92,392.44	101,557.18		
16	Norwich & Worcester,.....	24,000.00	24,000.00	24,000.00	24,380.00	24,000.00
17	Phila., Reading & New England,...				244,141.58	
18	Ridgefield & New York,.....					
19	Rockville,.....					
20	Shepaug, Litchfield & Northern,....	361.83	43.50			
21	Shore Line,.....	9,000.00	9,037.46	9,022.77	9,073.75	17,000.00
22	South Manchester,.....					
	Total,.....	\$2,675,489.58	\$2,023,632.42	\$1,391,127.85	\$2,292,702.46	\$1,316,820.50

COMPARATIVE STATEMENT FOR FIVE YEARS.

		ACCIDENTS TO PASSENGERS IN CONNECTICUT.									
Number.	RAILROADS.	1890.		1891.		1892.		1893.		1894.	
		Fatal.	Not Fatal.	Fatal.	Not Fatal.	Fatal.	Not Fatal.	Fatal.	Not Fatal.	Fatal.	Not Fatal.
1	Boston & New York Air Line,.....										
2	Central New England & Western,.....			2							
3	Colchester,.....										
4	Danbury & Norwalk,.....										
5	Hartford & Connecticut Valley,.....										
6	Hartford & Connecticut Western,.....										
7	Housatonic,.....	1	4		9	1					
8	Meriden, Waterbury & Conn. River,.....										
9	Naugatuck,.....										
10	New Haven & Derby,.....										
11	New Haven & Northampton,.....										
12	New London Northern,.....			1		2					
13	New York & New England,.....	5	10	1	14		5			1	4
14	New York, New Haven & Hartford,.....		15	2	29	1	9	4	10	1	5
15	New York, Providence & Boston,.....		1		1		5				
16	Norwich & Worcester,.....										
17	Philadelphia, Reading & New England,.....								3		1
18	Ridgefield & New York,.....										
19	Shepaug, Litchfield & Northern,.....										
20	Shore Line,.....										
21	South Manchester,.....										
Total,.....		6	30	3	56	2	21	6	13	2	10

SUMMARY OF THE FOREGOING TABLES.

	1893	1894	INCREASE.	DECREASE.
Capital stock issued,	\$84,997,140.88	\$90,006,840.88	\$5,009,700.00	
Capital stock held in Connecticut,	22,104,960.00	25,694,600.00	3,589,640.00	
Funded debt,	44,589,423.38	44,414,061.04		\$175,362.34
Current liabilities,	7,673,405.19	9,839,915.81	2,166,510.62	
Total stock and debt,	137,259,959.45	144,260,817.73	7,000,858.28	
Permanent investments,	142,678,163.36	151,665,663.43	8,987,505.07	
Gross earnings,	26,337,215.54	32,444,313.38	6,107,097.84	
Operating expenses,	18,473,967.23	23,315,520.56	4,841,553.33	
Net earnings,	7,863,248.31	9,128,792.82	1,265,544.51	
Paid for taxes,	1,180,193.29	1,733,538.58	553,345.29	
Paid for interest,	2,292,702.46	1,316,820.50		975,881.96
Paid for dividends,	3,856,918.00	4,572,573.50	715,655.50	
Income from passengers,	11,153,347.47	15,296,761.14	4,143,413.67	
Income from freight,	12,914,469.19	14,152,365.10	1,237,895.91	
Paid for maintenance of way and structures,	3,044,600.40	3,981,118.69	936,518.29	
Paid for maintenance of equipment,	2,488,820.11	2,788,860.71	300,040.60	
	Miles.	Miles.	Miles.	Miles.
Total length of main line and branches,	1,634.79	2,250.92	616.13	
Total of same in Connecticut,	1,013.22	1,013.22		
Total length of sidings,	647.40	945.03	297.63	
Total of same in Connecticut,	358.69	372.80	13.91	
Total second, third, and fourth tracks,	429.44	691.27	261.83	
Total of same in Connecticut,	245.21	262.72	17.51	
Run by passenger trains,	9,195,095	12,733,619	3,538,524	
Run by freight trains,	7,426,738	7,601,451	174,713	
Total run by all trains,	21,625,551	26,671,023	5,045,472	
Other trains,	5,003,718	6,335,893	1,332,175	
Total passenger mileage,	602,542,966	839,957,331	237,414,365	
Total freight mileage,	880,966,840	921,014,777	40,047,937	
Number of passengers carried,	33,611,019	53,775,945	20,164,926	
Number of tons of freight carried,	12,121,740	13,122,650	1,000,910	
Highway grade crossings in Connecticut,	*1,114	1,088		27
Number of men employed,	20,415	24,474	4,059	
Number of engines,	694	951	257	
Number of cars,	15,737	21,335	5,548	
Passengers injured — fatal,	6	2		4
Passengers injured — not fatal,	13	10		3
Employees injured — fatal,	64	23		41
Employees injured — not fatal,	445	171		274
Trespassers injured — fatal,	85	101	16	
Trespassers injured — not fatal,	78	74		4
Others injured — fatal,	18	8		10
Others injured — not fatal,	15	14		1
Injured at grade crossings — fatal,	16	10		6
Injured at grade crossings — not fatal,	15	12		3

*By error, number of highway crossings in Connecticut was reported last year as 1,114. Should have been 1,115.

Names of Railroad Commissioners, Commencement of Term, and Residence.

Zaccheus W. Bissell,*	Sharon,	1853	
Moses B. Harvey,*	Stafford,	1853	
John Stewart,*	Chatham,	1853	resigned.
James N. Palmer,*	New Haven,	1854	to fill vacancy.
John Gould,*	Fairfield,	1854	
John S. Jewett,*	Sharon,	1855	
Henry Hammond,	Killingly,	1856	
Patten Fitch,*	Bolton,	1857	
John Gould,*	Fairfield,	1858	
George D. Wadhams,*	Torrington,	1859	
Henry Hammond,	Killingly,	1860	
Joseph W. Dudley,*	Madison,	1861	
John J. Jacques,*	Waterbury,	1862	to fill vacancy.
Abel Scranton,*	Madison,	1862	
Samuel Fitch,	Stafford,	1863	
Abel Scranton,*	Madison,	1864	
William A. Cummings,*	Darien,	1865	
Samuel Fitch,	Stafford,	1866	
Albert Austin,*	Suffield,	1867	
James Pike,*	Sterling,	1868	
Charles H. Denison,	Stonington,	1869	resigned.
Simeon Gallup,*	Groton,	1870	to fill vacancy.
John I. Hutchinson,	Essex,	1870	
James Pike,*	Sterling,	1871	resigned.
Simeon Gallup,*	Groton,	1872	to fill vacancy.
Andrew Northrop,*	Brookfield,	1872	
Charles W. Scott,*	Sprague,	1873	to fill vacancy.
George W. Arnold,*	Haddam,	1873	
George M. Woodruff,	Litchfield,	1874	
Minott A. Osborn,*	New Haven,	1875	
George W. Arnold,*	Haddam,	1876	
George M. Woodruff,	Litchfield,	1877	
John W. Bacon,	Danbury,	1877	to fill vacancy.
John W. Bacon,	Danbury,	1878	
Francis A. Walker,	New Haven,	1879	resigned Nov.
William H. Hayward,	Colchester,	1880	to fill vacancy.
George M. Woodruff,	Litchfield,	1880	
John W. Bacon,	Danbury,	1881	
William H. Hayward,	Colchester,	1882	
George M. Woodruff,	Litchfield,	1883	
John W. Bacon,	Danbury,	1884	
William H. Hayward,	Colchester,	1885	
George M. Woodruff,	Litchfield,	1886	
William O. Seymour,	Ridgefield,	1887	
William H. Hayward,	Colchester,	1889	
George M. Woodruff,	Litchfield,	1893	
William O. Seymour,	Ridgefield,	1891	
Alex. C. Robertson,	Montville,	1893	

Clerk,.....HENRY F. BILLINGS,

HARTFORD, CONN.

OFFICE, Nos. 41 and 43 State Capitol, Hartford.

* Deceased.

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156	“ “ fatally.	
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161	“ “ not fatally.	
162	Others “ fatally.	
163	“ “ not fatally.	

RAILROAD RETURNS.

BOSTON & NEW YORK AIR LINE R. R. CO.

History.

Name of common carrier making this report? Boston & New York Air Line Railroad Company.

Date of organization? June 8, 1875.

Under laws of what Government, State, or Territory organized? Under the laws of the State of Connecticut. (Special Laws of Conn., vol. 7, p. 885; Conn. Special Acts, 1875, p. 178; Special Laws of Conn., vol. 8, pp. 17, 288; Conn. Special Acts, 1879, p. 137; Special Laws of Conn., vol. 9, p. 1009.)

If a reorganized company, give name of original corporation, and refer to laws under which it was organized. Originally The New Haven, Middletown & Willimantic Railroad Company. (Special Laws of Conn., vol. 6, pp. 286, 329, 462; U. S. Statutes at large, vol. 15, p. 272; Special Laws of Conn., vol. 6, pp. 577, 613, 652, 794, 807; vol. 7, pp. 2, 31, 145, 273; Conn. Special Acts, 1872, p. 190; Special Laws of Conn., vol. 7, pp. 543, 554, 555; Conn. Public Acts, 1874, chap. LXIV; Special Laws of Conn., vol. 7, p. 767; Conn. Special Acts, 1874, p. 271; Gen. Statutes of Conn., sec. 3820.)

What carrier operates the road of this company? New York, New Haven & Hartford Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
HENRY B. HAMMOND,	45 Broadway, N. Y.,	June 5, 1895.
T. L. WATSON,	Bridgeport, Conn.,	" "
S. F. LOOMER,	Willimantic, "	" "
CHARLES P. CLARK,	New Haven, "	" "
BENJAMIN DOUGLAS,	Middletown, "	(died in July, 1894.)
HENRY C. ROBINSON,	Hartford, "	June 5, 1895.
LEVERETT BRAINARD,	" "	" "
O. VINCENT COFFIN,	Middletown, "	" "
JOHN M. HALL,	Willimantic, "	" "

Total number of stockholders at date of last election. 407 holders of preferred stock; 222 holders of common stock; total, 629.

Date of last meeting of stockholders for election of directors. June 5, 1894.

Post-office address of general office. President, 45 Broadway, New York; Treasurer, New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed. W. L. Squire, Treasurer, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	HENRY B. HAMMOND.	45 Broadway, New York.
Vice-President,	JOHN M. HALL,	New Haven, Conn.
Secretary,	WM. E. BARNETT,	" "
Treasurer,	WM. L. SQUIRE,	" "

Property Leased, or Otherwise Assigned for Operation.

Name of Railroad the income of which from lease, or from other assignment for operation, is included in the Income Account (p. 156):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Boston & New York Air Line R. R. Co.	New Haven,	Willimantic,	New York, New Haven & Hartford R. R. Co.	Lease.	51.50

Contract existing between this Road and the Company by which it is Operated.

The Boston & New York Air Line Railroad was leased to the New York, New Haven & Hartford Railroad Company for 99 years from October 1, 1882, at an annual rental of \$120,000 and interest on its bonds and the bonds of the Colchester Railroad Company.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	10,000	\$100.00	\$1,000,000.00	\$851,400.00	None.	None.
Scrip,	.....	.....	.....	13,740.88	.....	"
Preferred,	30,000	100.00	3,000,000.00	2,998,500.00	4 p. ct.	\$119,940
Total,	40,000	.....	\$4,000,000.00	\$3,863,640.88	.....	\$119,940

Capital Stock.—Continued.

Manner of Payment for Capital Stock.	Total number Shares issued and Outstanding.	Total Cash Realized.
Preferred Stock issued for conversion of First Mortgage Bonds of New Haven, Middletown & Willimantic Railroad Company,	29,985	\$2,998,500.00
Common Stock issued for redeemed and unpaid coupons converted and in satisfaction of legal and equitable claims against the New Haven, Middletown & Willimantic Railroad Company,	8,514	851,400.00
Scrip, . . . . .	.....	13,740.88
Total,	38,499	\$3,863,640.88

REMARKS.—\$400.00 scrip stock converted into 4 shares common stock.

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
First Mortgage.	Aug., 1880	Aug., 1905	\$500,000.00	\$500,000.00	\$500,000.00	\$500,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
5 per cent.	February 1 and August 1.	\$25,000.00	\$25,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mge. Bds. (p.155),	\$500,000.00	\$500,000.00	\$25,000.00	\$25,000.00

Current Assets and Liabilities.

Cash and Current Assets available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$660.83	Cash Assets, \$660.83

Recapitulation.

For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 154),	\$3,863,640.88	\$3,863,640.88	51.50	\$75,022.15
Bonds (p. 155), . .	500,000.00	500,000.00	51.50	9,708.73
Total,	\$4,363,640.88	\$4,363,640.88	.....	\$84,730.88

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction,	\$4,437,147.83	\$4,437,147.83	\$86,158.21
Equipment,	129,931.94	129,931.94	2,522.95
Total (all in Connecticut), . .	\$4,567,079.77	\$4,567,079.77	\$88,681.16

Income Account.

Income from Lease of Road,		\$146,690.00
Dividends on Stocks owned (p. 157),	\$1,478.75	
Interest on Bonds owned (p. 157),	464.75	
Miscellaneous Income, less Expenses (p. 158), . .	1,000.00	2,943.50
Total Income,		\$149,633.50
Deductions from Income:		
Salaries and Maintenance of Organization, . .	\$588.40	
Interest on Funded Debt accrued (p. 155), . .	25,000.00	
Interest on Interest-bearing Current Liabilities accrued, not otherwise provided for, . .	1,750.00	
Other deductions,	2,956.80	
Total Deductions from Income,		\$30,295.20
Net Income,		\$119,338.30
Dividends, 4 per cent., Preferred Stock, . . .		\$119,940.00

Income Account.—Continued.

Deficit from Operations of year ending June 30, 1894,	\$601.70
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],	230,062.54
	<hr/> \$229,460.84
Additions for year,	1,707.00
	<hr/>
Surplus on June 30, 1894 [for entry on "General Balance Sheet"],	\$231,167.84
	<hr/> <hr/>

Stocks Owned.**Railway Stocks :**

Name.	Total Par Value.	Rate.	Income or Dividend Received.	Valuation.
481 shares Penn. R. R. Stock, at \$50 per share,	\$24,050.00	5%	\$1,301.25	\$24,050.00
43 shares C., B. & Q. Railroad Stock,	4,300.00	5%	177.50	3,440.00
				<hr/>
Total,	\$28,350.00	.....	\$1,478.75	\$27,490.00

Bonds Owned.**a. Railway Bonds :**

Name.	Total Par Value.	Rates.	Income or Interest Received.	Valuation.
C., B. & Q. Railroad Co., . . .	\$1,000.00	5%	\$50.00	\$1,000.00
C., B. & Q. Railroad Co., . . .	1,000.00	7%	38.50	1,000.00
				<hr/>
Total,	\$2,000.00	.....	\$88.50	\$2,000.00

b. Other Bonds :

Name.	Total Par Value.	Rate.	Income or Interest Received.	Valuation.
Town of Spencer, Ind., . . .	\$2,000.00	5½%	\$131.25	\$1,859.79
Town of Muskegon, Mich., . .	4,000.00	6%	120.00	} 8,510.00
Town of Muskegon, Mich., . .	5,000.00	5%	125.00	
				<hr/>
Total,	\$11,000.00	.....	\$376.25	\$10,369.79
				<hr/>
Grand Total, a and b, . . .	\$13,000.00	.....	\$464.75	\$12,369.79

Miscellaneous Income.

Item.	Gross Income.	Net Miscellaneous Income.
Received for 1 Bond town of Spencer, Ind.,	\$1,000.00	\$1,000.00

Rentals Paid.

Rents paid for lease of road:

Name of Road.	Interest on Bonds Guaranteed.	Total.
Colchester Railroad,	\$1,750.00	\$1,750.00

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$4,437,147.83	Cost of Road (p. 156),	\$4,437,147.83	.....	.....
129,931.94	Cost of Equipment (p.156),	129,931.94	.....	.....
25,783.00	Stocks owned (p. 157),	27,490.00	\$1,707.00	.....
12,369.79	Bonds owned (p. 157),	12,369.79	.....	.....
1,262.53	Cash & Cur. Assets (p.156),	660.83	.....	\$601.70
\$4,606,495.09	Grand Total,	\$4,607,600.39	\$1,707.00	\$601.70

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$3,863,640.88	Capital Stock (p. 154),	\$3,863,640.88	.....
500,000.00	Funded Debt, (p. 155),	500,000.00	.....
1,500.00	Bonds N. H., M. & W. R.R. Co., out- standing convertible into stock, . .	1,500.00	.....
11,291.67	Accrued Interest on Funded Debt not yet payable,	11,291.67	.....
230,062.54	Profit and Loss,	231,167.84	\$1,105.30
\$4,606,495.09	Grand Total,	\$4,607,600.39	\$1,105.30

Security for Funded Debt (p. 155).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From—	To—	Miles.	
First Mortgage,	New Haven	Willimantic.	51.50	\$9,708.74

Mileage.

State or Territory.	Line Represented by Capital Stock. Main Line.	Total Mileage owned.	Steel Rails.
Connecticut,	51.50	51.50	51.50

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
From—	To—	Miles.	Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
New Haven	Willimantic.	51.50	85	20.11	31.39

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate length of Descending Grades. Miles.
4.59	19	1,178	26.61	16	956	20.30

Characteristics of Road.—*Continued.***BRIDGES, TRESTLES, TUNNELS, ETC.**

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Stone, .	12	181	..	8	..	24	..
Iron, .	23	5,336	9	18	3	1,380	9
Wooden, .	5	82	..	12	..	34	..
Total, .	40	5,599	9	..	..	..	..
Trestles, .	1	6,694	..	..	..	..	..

HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:			
Bridges,	16	14	..

GAUGE OF TRACK — 4 feet, 8½ inches; 51.50 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Name of Owner.	Name of Operating Company.
51.50	Western Union Telegraph Co.	Western Union Telegraph Co.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, John M. Hall, Vice-President, and W. L. Squire, Treasurer, of the Boston & New York Air Line Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

JOHN M. HALL,
Vice-President.

W. L. SQUIRE,
Treasurer.

Subscribed and sworn to before me this 22d day of August, 1894.

AVERY CLARK,
Notary Public.

COLCHESTER RAILWAY COMPANY.

History.

Name of common carrier making this report? Colchester Railway Company.

Date of organization? 1876.

Under laws of what Government, State, or Territory organized? State of Connecticut.

If a consolidated company, name the constituent companies? The Colchester Railway was leased in 1877 to the Boston & New York Air Line Railroad Company for nine hundred and ninety-nine (999) years, without any consideration except it was to operate the road and pay the interest on the bonds of the lessor.

What carrier operates the road of this company? New York, New Haven & Hartford Railroad Company.

Organization.

Names of Directors.	Post-office Address.
ERASTUS S. DAY,	Colchester, Conn.
WILLIAM S. CURTIS,	" "
LEANDER CHAPMAN,	" "
GEORGE G. STANDISH,	Danbury, "

Total number of stockholders at date of last election? One.

Post-office address of general office. Colchester, Conn.

Officers.

Title.	Name.	Location of Office.
President,	ERASTUS S. DAY,	Colchester, Conn.

Property Leased, or Otherwise Assigned for Operation.

Name of Railroad the income of which from lease, or from other assignment for operation, is included in the Income Account :

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Colchester Railway Co.,	Colchester,	Turnerville.	N. Y., N. H. & H. R. R. Co.	Lease for 999 years.	3.59

Contract existing between this Road and the Company by which it is Operated.

Leased in 1877 to Boston & New York Air Line R.R. Co. for 999 years. The Boston & New York Air Line Co. to operate the road and pay interest on bonds. The road is now operated by the New York, New Haven & Hartford Railroad Company, lessees of the Boston & New York Air Line Railroad Company.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Common, . . .	500	\$100.00	\$50,000.00	\$25,000.00

Manner of Payment for Capital Stock.	Total Number of Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common,	250	\$25,000.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
1st Mortgage,	1877	1907	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
7 per cent.	January and July,	\$1,750.00	*\$1,750.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mort. Bonds (p. 163),	\$25,000.00	\$25,000.00	\$1,750.00	*\$1,750.00

*Interest paid by Lessee.

Recapitulation.

For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 163),	\$25,000.00	\$25,000.00	3.59	\$6,963.79
Bonds (p. 163), . .	25,000.00	25,000.00	3.59	6,963.78
Total, . . .	\$50,000.00	\$50,000.00	3.59	\$13,927.57

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Total Construction, . .	\$50,000.00	\$50,000.00	\$13,927.57

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.
\$50,000.00	Cost of Road (p. 164),	\$50,000.00

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.
\$25,000.00	Capital Stock (p. 163),	\$25,000.00
25,000.00	Funded Debt (p. 163),	25,000.00
\$50,000.00	Grand Total,	\$50,000.00

Security for Funded Debt (p. 163).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From —	To —	Miles.	
First Mortgage,	Colchester,	Turnerville.	3.59	\$6,963.78

Mileage.

Mileage of road making this report:

Line in Use.	Line Represented by Capital Stock. Main Line.
Miles of single track,	3.59
Miles of yard track and sidings,	4,908 feet.

Mileage owned by road making this report:

Line in Use.	Line Represented by Capital Stock. Main Line.	Steel Rails.
Total mileage owned (single track), .	3.59	3.59

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
From —	To —	Miles.	Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
Colchester,	Turnerville.	3.59	8	1.02	2.57

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate Length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate Length of Descending Grades. Miles.
.74	4	44	.95	5	85	1.90

GAUGE OF TRACK—4 feet, 8½ inches; 3.59 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
3.59	3.59	Western Union.	Western Union.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW LONDON, } ss.

I, the undersigned, Erastus S. Day, President of the Colchester Railway Company, on my oath do say that the foregoing return has been prepared under my direction, from the original books, papers, and records of said Company; that I have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of my knowledge, information, and belief; and I further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

ERASTUS S. DAY,
President.

Subscribed and sworn to before me this 12th day of September, 1894.

J. N. ADAMS,
Justice of the Peace.

DANBURY & NORWALK RAILROAD CO.

Name of common carrier making this report ? Danbury & Norwalk Railroad Company.

Date of organization ? May, 1849.

Under laws of what Government, State, or Territory organized? State of Connecticut.

What carrier operates the road of this company? New York, New Haven & Hartford Railroad Company.

Organization.

Name of Directors.	Post-office Address.	Expiration of Term.
F. ST. JOHN LOCKWOOD,	Norwalk, Conn.	October 25, 1894.
CHARLES P. CLARK,	New Haven, Conn.	" "
JOHN M. HALL,	" "	" "
BENJAMIN R. ENGLISH,	" "	" "
GEORGE J. BRUSH,	" "	" "
EBEN HILL,	South Norwalk, Conn.,	" "
EDMUND TWEEDY,	Danbury, Conn.	" "
CHARLES H. MERRITT,	" "	" "
J. P. TREADWELL,	Norwalk, "	" "

Total number of stockholders at date of last election? 76.

Date of last meeting of stockholders for election of directors? October 26, 1893.

Post-office address of general office? New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed? C. E. ROBINSON, Treasurer, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	F. ST. JOHN LOCKWOOD,	Norwalk, Conn.
Vice-President,	CHARLES P. CLARK,	New Haven, "
Secretary,	WILLIAM E. BARNETT,	" "
Treasurer,	C. E. ROBINSON,	" "

Property Leased, or Otherwise Assigned for Operation.

Name of Railroad, the income of which from lease, or from other assignment for operation, is included in the Income Account—(p. 170):

NAME.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Danbury & Norwalk,	Danbury, Ct.,	Wilson Pt., Ct.	N.Y., N.H. & H.	Lease.	26.28
Ridgefield Branch,	Branchville, "	Ridgefield, "	" "	"	2.97
Bethel Branch, "	Bethel, "	Hawleyville, "	S., L. & N.	"	5.95
Total Mileage,					35.20

Contract Existing between this Road and the Company by which it is Operated.

All the railroad and property of the Company leased to the New York, New Haven & Hartford Railroad Company for ninety-nine years from July 1, 1892.

Annual rental, 5 per cent. dividends on capital and interest on funded debt; all taxes and assessments.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	20,000	\$50.00	\$1,000,000.00	\$600,000.00	5 per ct.	\$30,000.00

Manner of Payment for Capital Stock.	Total Cash Realized.
Issued for Cash: Common,	\$338,416.25
Issued for Undivided Earnings,	101,583.75
Issued for increased value of road and equipment,	160,000.00
Total,	\$600,000.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.
	Date of Issue.	When Due.			
Consolidated Mortgage,	{ 1880 1890 1892	{ 1920 1920 1920	\$500,000.00	{ \$100 000 200 000 200 000	{ \$100,000.00 200,000.00 200,000.00
General Mortgage,	1885	1925		150,000	150,000.00
Grand Total, . . .	....	....	\$650,000.00	\$650,000	\$650,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
6 per cent.	January and July.	\$6,000.00	\$6,000.00
5 per cent.	January and July.	10,000.00	10,000.00
5 per cent.	January and July.	10,000.00	10,000.00
5 per cent.	April and October.	7,500.00	7,500.00
Total,	.....	\$33,500.00	\$33,500.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mtge. Bds. (p. 169),	\$650,000.00	\$650,000.00	\$33,500.00	\$33,500.00

Recapitulation.

For mileage owned by road making this report :

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 168),	\$600,000.00	\$600,000.00	36.20	\$16,574.58
Bonds (p. 168),	650,000.00	650,000.00	36.20	17,955.80
Total,	\$1,250,000.00	\$1,250,000.00	36.20	\$34,530.38

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction,	\$1,170,270.83	\$1,170,270.83	\$32,327.92
Equipment,	228,971.89	228,971.89	6,325.19
Total,	\$1,399,242.72	\$1,399,242.72	\$38,653.11

REMARKS.—No data for items.

Income Account.

Income from Lease of Road,	\$63,500 00	
Total Income,		\$63,500.00
Deductions from Income :		
Interest on Funded Debt accrued (p. 169), . . .	\$33,500.00	
Total deductions from Income,		33,500.00
Net Income,		\$30,000 00
Dividends, 5 per cent., Common Stock,		30,000.00
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],		\$134,367.72
Surplus on June 30, 1894 [from entry on "General Balance Sheet"],		134,367.72

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Decrease, Year ending June 30, 1894.
\$1,170,270.83	Cost of Road (p. 170), . . .	\$1,170,270.83	
228,971.89	Cost of Equipment (p. 170), . .	228,971.89	
50,000.00	Stocks owned, . . . . .	.....	\$50,000 00
\$1,449,242.72	Grand Total,	\$1,399,242.72	\$50,000.00

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Decrease, Year ending June 30, 1894.
\$600,000.00	Capital Stock (p. 168), . . .	\$600,000.00	
650,000 00	Funded Debt (p. 169), . . .	650,000.00	
50,000.00	Current Liabilities, . . . . .	.....	\$50,000.00
14,875.00	Accrued Interest on Funded Debt not yet payable, . . .	14,875.00	
134,367.72	Profit and Loss,	134,367.72	
\$1,449,242.72	Grand Total,	\$1,399,242.72	\$50,000 00

Contracts, Agreements, etc.

All contracts, etc., by lessee company.

Security for Funded Debt.

Class of Bond or Obligation.	What Road Mortgaged.	Miles.	Amount of Mortgage per Mile of Line.	What Equipm't M'tgaged.	What Income M'tgaged.	What Securities M'tgaged.
Consolidated Mortgage,	{ All.	36.20	\$13,812.15	All.	None.	None.
General Mortgage,	{ All.	36.20	4,143.64	All.	None.	None.

Mileage.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	Steel Rails.
	Main Line.	Branches and Spurs.		
Connecticut,	26.28	9.92	36.20	36.20

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, F. St. John Lockwood, President, and C. E. Robinson, Treasurer of the Danbury & Norwalk Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

F. ST. JOHN LOCKWOOD,

President.

C. E. ROBINSON,

Treasurer.

Subscribed and sworn to before me this 10th day of August, 1894.

A. S. MAY,

Notary Public.

HARTFORD & CONNECTICUT WESTERN RAILROAD COMPANY.

History.

Name of common carrier making this report? Hartford & Connecticut Western Railroad Company.

Date of organization? June 30, 1881.

Under laws of what Government, State, or Territory organized? State of Connecticut, January, 1881, Resolution No. 123; January, 1882, Resolution No. 189. State of New York, laws of 1882, Chapter 339.

If a consolidated company, name the constituent companies. Not a consolidated company.

If a reorganized company, give name of original corporation, and refer to laws under which it was organized. Connecticut Western Railroad Company; chartered June 25, 1868; opened December 21, 1871.

The Hartford & Connecticut Western Railroad Company is the successor of the Connecticut Western Railroad Company by reason of foreclosure of mortgage, and was organized June 30, 1881, in accordance with a resolution (No. 123) of the General Assembly of the State of Connecticut, passed at its session January, 1881, "Incorporating the First Mortgage Bondholders of the Connecticut Western Railroad Company as the Hartford & Connecticut Western Railroad Company." By a resolution (No. 189) of the General Assembly of the State of Connecticut, passed at its session January, 1882, permission was given to the Hartford & Connecticut Western Railroad Company to purchase the Rhinebeck & Connecticut Railroad in the State of New York. Chapter 339 of the laws of 1882 of the State of New York is "An Act to authorize the Hartford & Connecticut Western Railroad Company to purchase the Rhinebeck & Connecticut Railroad." The Hartford & Connecticut Western Railroad was leased under date of August 30, 1889, to the Central New England & Western Railroad Company for one year from the 30th day of August, 1889, and under date of February 4, 1890, for fifty years from the 30th day of August, 1890.

What carrier operates the road of this company? James K. O. Sherwood, Receiver of the Philadelphia, Reading & New England Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
H. O. SEIXAS,	New York, N. Y.,	December 18, 1894.
JAMES ARMSTRONG,	" "	" "
A. A. MCLEOD,	Philadelphia, Pa.,	" "
W. R. TAYLOR,	" "	" "
J. W. BROCK,	" "	" "
W. W. GIBBS,	" "	" "
C. TOWER, JR.,	" "	" "
J. H. APPLETON,	Springfield, Mass.,	" "
H. A. BOTSFORD,	Hartford, Conn.,	" "
J. O. PHELPS,	Simsbury, Conn.,	" "
HENRY GAY,	West Winsted, Conn.,	" "
FREDERICK MILES,	Chapinville, Conn.,	" "
E. W. SPURR,	Falls Village, Conn.,	" "

Total number of stockholders at date of last election? 681.

Date of last meeting of stockholders for election of directors? December 19, 1893.

Post-office address of general office? Hartford, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed? E. R. BEARDSLEY, Treasurer, Hartford, Conn.

Officers.

Title.	Name.	Location of Office.
President,	H. O. SEIXAS,	New York, N. Y.
Vice-President,	J. O. PHELPS,	Simsbury, Conn.
Secretary,	E. R. BEARDSLEY,	Hartford, Conn.
Treasurer,	E. R. BEARDSLEY,	" "
Auditor,	H. W. WATSON,	" "

Property Leased, or Otherwise Assigned for Operation.

Name of Railroad the income of which from lease, or from other assignment for operation, is included in the Income Account (p. 175):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Hartford & Conn. Western Leased to Central New England & Western.	Hartford	Rhinecliff.	James K. O. Sherwood, receiver of the Philadelphia, Reading & New England.	Lease. 2 per cent. on Capital Stock.	109.75

Contract existing between this Road and the Company by which it is Operated.

The Hartford & Connecticut Western Railroad was leased to the Central New England & Western Railroad Company under date of February 4, 1890, for fifty years from the 30th day of August, 1890, to which date it had been leased for the period of one year from the 30th day of August, 1889, at an annual rental of two per cent. on the Capital Stock. All taxes, rates, charges, assessments, and interest on the bonds to be paid by the lessee.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	30,000	\$100.00	\$3,000,000	\$2,700,200	1% on \$2,699,000. 1% on \$2,699,300,	\$26,990 26,993
Total,	.....	.....	.....	.....	.....	\$53,983

Capital Stock.—Continued.

Manner of Payment for Capital Stock.	Number of Shares Issued during Year.	Total Number Shares Issued and Outstanding.
Issued for bonds of the Conn. Western R. R. Co.,	12	19,002
“ for purchase of Rhinebeck & Conn. R. R.,	..	8,000
Total,	12	27,002

REMARKS.—\$2,000 bonds converted into stock at 60 per cent.

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash realized on amount Issued.
	Date of Issue.	When Due.				
1st Mortgage,	1883 June 30.	1903 July 1.	\$700,000.00	\$700,000.00	\$700,000.00	\$700,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
5 per cent.	January and July,	\$35,000.00	\$35,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mortgage Bds. (p. 175),	\$700,000 00	\$700,000.00	\$35,000.00	\$35,000.00

Current Assets and Liabilities.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Current Liabilities, . . . \$22,697.99	Loans and Bills Payable, \$22,697.99

Recapitulation.

For mileage owned by road making this report :

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 174),	\$2,700,200.00	\$2,700,200.00	109.75	\$24,603.19
Bonds (p. 175),	700,000.00	700,000.00	109.75	6,378.13
Cur. Liabilities (p. 175),	22,697.99	22,697.99	109.75	206.81
Total,	\$3,422,897.99	\$3,422,897.99		\$31,188.13

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Total Construction,	\$2,921,747.46	\$2,921,747.46	\$26,621.84
Total Equipment,	373,867.97	373,867.97	3,406.54
Grand Total Cost Construction, } Equipment, etc., }	\$3,295,615.43	\$3,295,615.43	\$30,028.38

Income Account.

Income from Lease of Road,	\$88,983.00	
Total Income,		\$88,983.00
Interest on Funded Debt accrued (p. 175),		35,000.00
Net Income,		\$53,983.00
<hr/>		
Dividends, 2 per cent., common stock (p. 174), . .		\$53,983.00
<hr/>		
Deficit on June 30, 1893 [from "General Balance Sheet," 1893 Report],		\$10,310.51
Deficit on June 30, 1894 [from entry on "General Balance Sheet,"],		10,310.51
<hr/>		

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.
\$2,921,747.46	Cost of Road (p. 175),	\$2,921,747.46
373,867.97	Cost of Equipment (p. 175),	373,867.97
37,672.58	Springfield & Connecticut Railroad,	37,672.58
99,099.47	Lands owned,	99,099.47
10,310.51	Profit and Loss,	10,310.51
\$3,442,697.99	Grand Total,	\$3,442,697.99

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase, Year ending June 30, 1894.	Decrease, Year ending June 30, 1894.
\$2,699,000.00	Capital Stock (p. 174),	\$2,700,200.00	\$1,200.00	
21,000.00	Convertible Bonds,	19,800.00	.....	\$1,200.00
700,000.00	Funded Debt (p. 175),	700,000.00		
22,697.99	Bills Payable,	22,697.99		
\$3,442,697.99	Grand Total,	\$3,442,697.99	\$1,200.00	\$1,200.00

Important Changes during the Year.

Twelve shares of Hartford & Connecticut Western stock have been issued in exchange for \$2,000 of Connecticut Western bonds at 60 per cent.

Security for Funded Debt (p. 175).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.	What Equipment Mortgaged.
	From —	To —	Miles.		
First Mortgage,	Hartford	Rhinecliff.	109.75	\$6,378.13	Entire.

Description of Equipment.

All equipment leased.

Mileage.

State or Territory.	Line Represented by Capital Stock. Main Line.	Iron Rails.	Steel Rails.
New York,	42.50	11.79	30.71
Connecticut,	67.25	....	67.25
Total Mileage owned (single track),	109.75	11.79	97.96

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
From—	To—	Miles.	Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
Hartford	Rhinecliff.	109.75	333	49.76	59.99

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate Length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate Length of Descending Grades. Miles.
14.50	75	1,941.1	44.95	83	1,969.2	50.30

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.	MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Feet.	Inches.
Bridges: Iron, Wooden,	33	1,177	7	10	201	8
	153	3,473	1	5	186	6
Total, . . .	186	4,650	8	..	....	..
Trestles, . . .	30	7,300	7	38	1,802	..

HIGHWAY CROSSINGS.

Item.	Number.	Height of Lowest above Surface of Rail. Feet.
Overhead Highway Crossings: Bridges,	10	17

GAUGE OF TRACK—4 feet, $8\frac{1}{2}$ inches ; 109.75 miles.

Telegraph.

Reported by lessee.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF HARTFORD, } ss.

We, the undersigned, Jeffery O. Phelps, Vice-President, and Edward R. Beardsley, Treasurer, of the Hartford & Connecticut Western Railroad Company, on our oath do severally say that the foregoing return has been prepared under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing returns embrace all the financial operations of said Company during the period for which said return is made.

JEFFERY O. PHELPS,
Vice-President.

EDWARD R. BEARDSLEY,
Treasurer.

Subscribed and sworn to before me this 4th day of August, 1894.

FRED. D. JEWETT,
Notary Public.

HOUSATONIC RAILROAD COMPANY.

History.

Name of common carrier making this report? Housatonic Railroad Company.

Date of organization? May, 1836.

Under laws of what Government, State, or Territory organized? State of Connecticut, under enactments in the following years, viz: 1838, 1839, 1841, 1842, 1843, 1844, 1845, 1850, 1870, and 1889.

What carrier operates the road of this company? New York, New Haven, & Hartford Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
A. B. MYGATT,	New Milford, Conn.,	October 24, 1894.
GEO. MACCULLOCH MILLER,	New York City,	" "
J. PIERPONT MORGAN,	" "	" "
WILLIAM ROCKEFELLER,	" "	" "
CHARLES P. CLARK,	New Haven, Conn.,	" "
JOHN M. HALL,	" "	" "
WILLIAM E. BARNETT,	" "	" "
MILO B. RICHARDSON,	Lime Rock, Conn.,	" "
CHARLES LANIER,	New York City,	" "

Total number of stockholders at date of last election. 145.

Date of last meeting of stockholders for election of directors. October 25, 1893.

Post-office address of general office. New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed. C. E. Robinson, Treasurer, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	GEO. MACCULLOCH MILLER,	New York City.
Vice-President,	WILLIAM E. BARNETT,	New Haven, Conn.
Secretary,	" "	" "
Treasurer,	CHARLES E. ROBINSON,	" "

Property Leased, or Otherwise Assigned for Operation.

Name of Railroad the income of which from lease, or from other assignment for operation, is included in the income account — (p. 183):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From —	To —			
Housatonic Railroad Co.	Bridgeport, Conn.,	Mass. State Line.	N. Y., N. H. & H.	Lease.	74.97
	Botsford, “	Huntington, Conn.	“ “	“	9.79
	Brookfield J'n, “	Danbury, “	“ “	“	5.36
Total Mileage,					90.12

Contract Existing between this Road and the Company by which it is Operated.

Leased to the New York, New Haven & Hartford Railroad Company for 99 years from July 1, 1892. Rental: one per cent. dividend on the preferred capital stock, payable June 30th each year; also interest on the funded debt as same becomes due.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	.....	\$100.00	.....	\$23,300.00	None.	
Preferred,	30,000	100.00	\$3,000,000.00	2,875,600.00	1 %	\$28,756
Total,	.....	.....	\$3,000,000.00	\$2,898,900.00	.....	\$28,756

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common,	233	Cannot as- certain.
Issued for exchange of pref. stock for common stock: Preferred,	28,756	
Total,	28,989	

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash realized on amount Issued.
	Date of Issue.	When Due.				
First Mortgage, Consol. Mtge., Mortgage,	1885	1910	\$700,000	\$400,000	\$100,000	Cannot determine amount realized.
	1887	1937	3,000,000	2,839,000	2,839,000	
	1882	1912	100,000	70,000	61,000	
Total, . . .	.....	.....	\$3,800,000	\$3,309,000	\$3,000,000	

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
4 per cent.	April and October.	\$4,000.00	\$4,000.00
5 per cent.	May and November.	141,950.00	141,950.00
5 per cent.	April and October.	3,050.00	3,050.00
Total,		\$149,000.00	\$149,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mort. Bds., (p.182),	\$3,309,000.00	\$3,000,000.00	\$149,000.00	\$149,000.00

Recapitulation.

For mileage owned by road making this report.

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p 181),	\$2,898,900 00	\$2,898,900.00	90.12	\$32,167.11
Bonds (p. 182), . . .	3,000,000.00	3,000,000.00	90.12	33,288.95
Total,	\$5,898,900.00	\$5,898,900.00	90.12	\$65,456.06

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction,	\$5,203,645.91	\$5,203,645.91	\$57,741.30
Equipment,	1,581,536.15	\$1,581,536.15	17,549.22
Total Cost Construction, Equipment, etc., }	\$6,785,182.06	\$6,785,182.06	\$75,290.52

Income Account.

Income from Lease of Road,	\$177,756.00	
Total Income,		\$177,756.00
Interest on Funded Debt accrued (p. 182), . .		149,000.00
Net Income,		\$28,756.00
Dividends, 1 per cent., preferred stock (p. 181),		28,756.00
Deficit on June 30, 1893, [from "General Balance Sheet," 1893 Report],		\$128,341.00
Deficit on June 30, 1894, [for entry on "General Balance Sheet," p. 183],		\$128,341.00

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.
\$5,203,645.91	Cost of Road (p. 183),	\$5,203,645.91
1,581,536.15	Cost of Equipment (p. 183),	1,581,536.15
178,481.32	Other Permanent Investments,	178,481.32
128,341.00	Profit and Loss,	128,341.00
\$7,092,004.38	Grand Total,	\$7,092,004.38

Comparative General Balance Sheet.—Continued.

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.
\$2,898,900.00	Capital Stock (p. 181), . . .	\$2,898,900.00
3,000,000.00	Funded Debt (p. 182), . . .	3,000,000.00
	N. Y., N. H. & H. Co., Lessee. Liabilities assumed by that company, viz.:	
1,841,317.05	Current, . . . \$1,841,317.05	
135,317.03	Accrued, . . . 135,317.03	
400,000.00	Deferred, . . . 400,000.00	
\$2,376,634.08		\$2,376,634.08
	Less cash, materials on hand, and other assets turned over to the N. Y., N. H. & H. R. R. Co., Lessee, . . . 1,183,529.70	
1,183,529.70		1,193,104.38
\$1,193,104.38		
\$7,092,004.38	Grand Total,	\$7,092,004.38

Important Changes during the Year.

No important changes.

Contracts, Agreements, etc.

See report of New York, New Haven & Hartford Railroad Co.

Security for Funded Debt —(page 182).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.	What Equipment Mortgaged.	What Income or Securities Mortgaged.
	From—	To—	Miles.			
First Mortgage,	Bridgeport, Ct.,	Mass. Sta. Line.	74.97	{ Whole issue limited to \$3,000,000. }	All.	None.
Consol. Mortgage,	Bridgeport, Ct.,	Mass. Sta. Line.	74.97			
Mortgage, . . .	Brkfd Jc., Ct.,	Danbury, Ct.	5.36			

Employees and Salaries.

See report of New York, New Haven & Hartford Railroad Co.

Description of Equipment.

Equipment reported by the New York, New Haven & Hartford R.R. Co.

Mileage.**a. Mileage of road owned:**

Line in Use.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	RAILS.	
	Main Line.	Branches and Spurs.		Iron.	Steel.
Miles of single track,	74.97	15.15	90.12	.....	90.12
Miles of yard track and sidings,	15.09	1.86	16.95	2.85	14.10
Total Mileage owned (all tracks),	90 06	17.01	107.07	2.85	104.22

c. Mileage of line owned, by States and Territories (single track) :

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	Steel Rails.
	Main Line.	Branches and Spurs.		
Connecticut,	74.97	15.15	90.12	90.12

Renewals of Rails and Ties.

See report of New York, New Haven & Hartford Railroad Co.

Accidents to Persons.

See report of New York, New Haven & Hartford Railroad Co.

Characteristics of Road.

For alignment and profile see report of the New York, New Haven & Hartford Railroad Co.

Characteristics of Road.—Continued.**BRIDGES, TRESTLES, TUNNELS, ETC.**

Item.	Number	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Stone,	12	166	...	10	..	26	....
Iron,	5	548	....	27	6	341,	....
Wooden,	13	566	..	13	..	177	...
Total,	30	1,280	....	..	....	....	....
Trestles,	4	1,919	....	116	....	720	....
Tunnels,	1	250	....	....	....	...	....

HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings: Bridges,	3	14	....
Tunnels,	1	14	2

GAUGE OF TRACK—4 feet, 8½ inches; 90.12 miles.

Telegraph.

a. Owned by company making this report.

Miles of Line.	Miles of Wire.	Name of Operating Company.
9.79	Western Union Telegraph Co.

Telegraph.—*Continued.*

b. Owned by another company, but located on property of road making this report :

Miles of Line.	Name of Owner.	Name of Operating Company.
90.12	Western Union Telegraph Co.	Western Union Telegraph Co.

Car Mileage.

See report of New York, New Haven & Hartford Railroad Co.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, Wm. E. Barnett, Vice-President, and C. E. Robinson, Treasurer, of the Housatonic Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

WM. E. BARNETT,
Vice-President.

C. E. ROBINSON,
Treasurer.

Subscribed and sworn to before me this 15th day of September, 1894.

A. S. MAY,
Notary Public.

MERIDEN, WATERBURY & CONNECTICUT RIVER RAILROAD CO.

History.

Name of common carrier making this report? Meriden, Waterbury & Connecticut River Railroad Company.

Date of organization? June 9, 1888.

Under laws of what Government, State, or Territory organized? State of Connecticut.

If a consolidated company, name the constituent companies.

Formed by the consolidation of the Meriden & Cromwell Railroad Company, organized under the General Railroad Laws of Connecticut, July 10, 1882, and the Meriden & Waterbury Railroad Company, organized under the General Railroad Laws of Connecticut, May 24, 1887.

Date and authority for each consolidation.

Consolidated under an act entitled "An Act authorizing the consolidation of certain Railroad Companies," passed by the General Assembly of the State of Connecticut, at its January Session, 1887, approved March 10, 1887, and to be found on pages 481, 482, and 483, of the Special Acts and Resolutions of the General Assembly of the State of Connecticut, January Session, 1887.

What carrier operates the road of this company?

The New York & New England Railroad Company has operated this road since September 1, 1892.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
F. H. PRINCE,	Boston, Mass.,	November 14, 1894.
J. T. ODELL,	" "	" "
D. S. PLUME,	Waterbury, Conn.,	" "
A. S. CHASE,	" "	" "
E. D. STEELE,	" "	" "
SAMUEL DODD,	Meriden, "	" "
W. H. LYON,	" "	" "
C. B. ROGERS,	" "	" "
GEORGE ROCKWELL,	" "	" "

Total number of stockholders at date of last election. 277.

Date of last meeting of stockholders for election of directors. November 14, 1893.

Post-office address of general office. 180 Summer street, Boston, Mass.

Name and address of officer to whom correspondence regarding this report should be addressed. Geo. B. Phippen, Secretary, 180 Summer street, Boston, Mass.

Officers.

Title.	Name.	Location.
President,	F. H. PRINCE,	Boston, Mass.
Vice-President,	D. S. PLUME,	Waterbury, Conn.
Secretary and Treasurer,	GEO. B. PHIPPEN,	180 Summer St., Boston, Mass.

Property Leased, or otherwise Assigned for Operation.

Name of Railroad the income of which from lease, or from other assignment for operation, is included in the Income Account (p. 191):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Meriden, Waterbury & Conn. River Railroad,	Cromwell	Waterbury.	New York & New England Railroad Co.	Leased for 99 years from Sept. 1, 1892.	30.34

Contract existing between this Road and the Company by which it is Operated.

The road was leased to the New York & New England Railroad Company for ninety-nine years from September 1, 1892. Agreed rental, \$22,500.00 per annum, payable semi-annually January 1st and July 1st to the Farmers Loan and Trust Company of New York, Trustees. The Railroad Company has deposited with the Trustees \$50,000 of their First Mortgage Bonds to re-imburse the lessee for floating debt assumed and improvements to be made.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Common,	5,000	\$100.00	\$500,000.00	\$484,000.00

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.
Issued for consolidation of the Meriden & Cromwell Railroad Company, and the Meriden & Waterbury Railroad Company.	4,840

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
1st Mtge. Bds.,	1888 July 1.	1925 July 1.	\$450,000.00	\$450,000.00	\$450,000.00	\$450,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
5 per cent.	January and July.	\$22,500.00	None.

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mort. Bonds (p. 190),	\$450,000.00	\$450,000.00	\$22,500.00	None.

Current Assets and Liabilities.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Due from Solvent Companies and Individuals, \$22,500.00	Matured Interest Coupons Unpaid, including Coupons due July 1, \$22,500.00

Recapitulation.

For mileage owned by road making this report.

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 189),	\$484,000.00	\$484,000.00	30.34	\$15,952.53
Bonds (p. 190),	450,000.00	450,000.00	30.34	14,831.90
Cur. Liabilities (p. 190),	22,500.00	22,500.00	30.34	741.61
Total,	\$956,500.00	\$956,500.00	30.34	\$31,526.04

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Total cost Construction, Equip't, etc.,	\$934,000.00	*\$934,000.00	\$30,784.43

* NOTE.—This amount is not the actual amount spent in constructing the road and in furnishing equipment, but represents the amount so expended less a credit of \$623,660.06 transferred from Profit and Loss Account because of the reduction in amount of bonds outstanding, the abatement of accrued bond interest, and the assumption by the Lessees of floating indebtedness. By this credit the Profit and Loss Account was balanced, and the cost of road and equipment was made equal to the amount of Capital Stock and Bonds outstanding.

Income Account.

Income from Lease of Road,	\$22,500.00	
Total Income,		\$22,500.00
Interest on Funded Debt accrued (p. 190),	\$22,500.00	
Total Deductions from Income,		\$22,500.00

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$934,000.00	{ Cost of Road (p. 191), Cost of Equipment (p. 191), Cash and Current Assets (p. 190),	\$934,000.00 22,500.00	\$22,500.00
\$934,000.00	Grand Total,	\$956,500.00	\$22,500.00

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$484,000.00 450,000.00	Capital Stock (p. 189), Funded Debt (p. 190), Current Liabilities (p. 191),	\$484,000.00 450,000.00 22,500.00	\$22,500.00
\$934,000.00	Grand Total,	\$956,500.00	\$22,500.00

Security for Funded Debt (p. 190).

Class of Bond or Obligation.	What Road Mortgaged.	Miles.	Amount of Mortgage per Mile of Line.	What Equipment Mortgaged.
First Mortgage Bonds,	Entire Line.	30.34	\$14,831.90	All.

Description of Equipment.

Included in report of New York & New England Railroad Company.

Mileage.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	Steel Rails.
	Main Line.	Branches and Spurs.		
Connecticut,	29.50	.84	30.34	30.34

Accidents to Persons.

Included in report of New York & New England Railroad Co.

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
			Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
From —	To—	Miles.			
Cromwell, Conn.	Waterbury, Conn.	29.50	69	14.26	15.24
Center St. Extension	in Meriden.	.84	3	.30	.54
Total,		30.34	72	14.56	15.78

Characteristics of Road.—Continued.

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate length of Descending Grades. Miles.
6.23	24	779.5	12.68	19	512.5	10.59
.....	.....	.....	.....	1	48.0	.84
6.23	24	779.5	12.68	20	560.5	11.43

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Iron,	19	1,509	..	21	..	192	..
Wooden,	7	175	..	12	..	50	..
Total,	26	1,684	..	..	..	..	..
Trestles,	30	6,751	..	12	..	2,944	..

OVERHEAD CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:—Bridges,	13	15	..
Trestles,	6	18	..
Total,	19	..	..
Overhead Railway Crossings:—Bridges,	2	15	..

GAUGE OF TRACK—4 feet, 8½ inches; 30.34 miles.

Telegraph.

Owned by another company, but located on property of road making this report.

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
30.34	83.14	Western Union Tel. Co.	Western Union Tel. Co.

Car Mileage.

The Lessees pay all mileage charges.

Oath.

STATE OF MASSACHUSETTS, } ss.
COUNTY OF SUFFOLK,

We, the undersigned, F. H. Prince, President, and George B. Phippen, Treasurer, of the Meriden, Waterbury & Connecticut River Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

F. H. PRINCE,
President.

GEORGE B. PHIPPEN,
Treasurer.

Subscribed and sworn to by F. H. Prince before me this 21st day of September, 1894.

WILLIAM H. FLEMING,
Justice of the Peace.

Subscribed and sworn to by George B. Phippen before me this 13th day of September, 1894.

WALTER S. WILCOMBE,
Justice of the Peace.

NAUGATUCK RAILROAD COMPANY.

History.

Name of common carrier making this report? Naugatuck Railroad Company.

Date of organization? May, 1845.

Under laws of what Government, State, or Territory organized? State of Connecticut. (Private Laws of Connecticut, vol. iv, pp. 944-949, 950, 951, 952; do. vol. v, pp. 75, 753; Special Laws of Connecticut, vol. vi, pp. 8, 9, 23, 293, 709, 874; do. vol. vii, p. 114.

If a consolidated company, name the constituent companies. Not a consolidated company. Watertown & Waterbury Railroad now merged and included in Naugatuck Railroad.

Date and authority for each consolidation: The Naugatuck Railroad Company held all the stock and outstanding bonds of the Watertown & Waterbury Railroad Company. The mortgage of the Watertown & Waterbury Railroad Co. was foreclosed in the fiscal year ending June 30, 1893, and its property and franchise were merged in the Naugatuck Railroad Company.

What carrier operates the road of this company? Leased to and operated by the New York, New Haven & Hartford Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Date of Expiration of Term.
W. D. BISHOP,	Bridgeport, Conn.,	November 21, 1894.
W. D. BISHOP, JR.,	" "	" "
R. M. BASSETT,	Derby, "	" "
S. S. DENNIS,	Newark, N. J.,	" "
CHARLES M. BROOKER,	Torrington, Conn.,	" "
JOEL A. SPERRY,	New Haven, "	" "
JOHN M. HALL,	Willimantic, "	" "
A. HEATON ROBERTSON,	New Haven, "	" "
F. J. KINGSBURY,	Waterbury, "	" "

Total number of stockholders at date of last election? 433.

Date of last meeting of stockholders for election of directors? November 15, 1893 (third Wednesday in November, each year).

Post-office address of general office? President and Secretary, Bridgeport, Conn.

Post-office address of operating office? New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed? W. L. SQUIRE, Treasurer, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	W. D. BISHOP,	Bridgeport, Conn.
Secretary,	HORACE NICHOLS (died in March, 1894).	
Treasurer,	W. L. SQUIRE,	New Haven, Conn.

Property Leased, or otherwise Assigned for Operation.

Name of railroad the income of which from lease, or from other assignment for operation, is included in the income account — (p. 198):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From--	To--			
Naugatuck Railroad Co.	Naugatuck Junction	Winsted.	New York, New Haven & Hartford R. R. Co.	Lease.	56.55
	Watertown	Waterbury.			4.44
Total mileage,					60.99

Contract Existing between this Road and the Company by which it is Operated.

The Naugatuck Railroad was leased May 24, 1887, to the New York, New Haven & Hartford Railroad Company for ninety-nine years from April 1, 1887, at an annual rental of \$200,000 and interest on the bonds of the Naugatuck Railroad Company.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED ³ DURING YEAR.	
					Rate.	Amount.
Common.	20,000	\$100.00	\$2,000,000.00	\$2,000,000.00	10 p. c.	\$200,000.00

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash, Common,	3,976.96	\$397,696.00
Issued for Bonds,	2,730	273,000.00
Issued for Construction, Common,	6,758.79	675,879.00
Issued for Undivided Earnings,	1,427	142,700.00
Issued for increased valuation of road or equip- ment, or both,	4,488.25	448,825.00
Stock charged Profit & Loss for loss on stock sold,	302	30,200.00
Stock charged Profit & Loss for over-issue by New York transfer agent,	317	31,700.00
Total,	20,000.00	\$2,000,000.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
1st Mortgage,	1863	1913	\$750,000.00	\$150,000.00	\$150,000.00	\$150,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
4 per cent.	June and December.	\$6,000.00	\$6,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amt. Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mortgage Bonds (p. 197),	\$150,000.00	\$150,000.00	\$6,000.00	\$6,000.00

Recapitulation.

For mileage owned by road making this report :

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 196),	\$2,000,000.00	\$2,000,000.00	60.99	\$32,792.26
Bonds (p. 197), . . .	150,000.00	150,000.00	60.99	2,459.42
Total,	\$2,150,000.00	\$2,150,000.00		\$35,251.68

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction,	\$2,024,697.45	\$2,024,697.45	\$35,803.67
Equipment,	297,086.57	297,086.57	5,253.52
Total,	\$2,321,784.02	\$2,321,784.02	\$41,057.19

Income Account.

Income from lease of road,	\$206,000.00
Total Income,	\$206,000.00
Deductions from Income:	
Interest on Funded Debt accrued (page 197), . . .	\$6,000.00
Net Income,	\$200,000.00
Dividends, 10 per cent., common stock (p. 196), . .	\$200,000.00
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],	\$272,784.02
Surplus on June 30, 1894 [for entry on "General Balance Sheet"—p. 199],	272,784.02

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.
\$2,024,697.45	Cost of Road (p. 198),	\$2,024,697.45
297,086.57	Cost of Equipment (p. 198),	297,086.57
101,500.00	Lands owned,	101,500.00
\$2,423,284.02	Grand Total,	\$2,423,284.02

Comparative General Balance Sheet.—Continued.

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.
\$2,000,000.00	Capital Stock (p. 196),	\$2,000,000.00
150,000.00	Funded Debt,	150,000.00
500.00	Accrued interest on funded debt not yet payable,	500.00
272,784.02	Profit and Loss,	272,784.02
\$2,423,284.02	Grand Total,	\$2,423,284.02

Security for Funded Debt.

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From—	To—	Miles.	
First Mortgage,	Naugatuck Junc.	Winsted.	56.55	\$2,652.52

Employees and Salaries.

Included in report of the lessee company, the N. Y., N. H. & H. R. R. Co.

Mileage.

Mileage of road operated (all tracks), included in report of Lessee Co., the New York, New Haven & Hartford Railroad Co.

MILEAGE OF LINE OWNED.

State or Territory.	Line Represented by Capital Stock. Main Line.	Total Mileage Owned.	Steel Rails.
Connecticut,	60.99	60.99	60.99

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
From—	To—	Miles.	Number of Curves.	Aggregate Length of Curved Line, Miles.	Length of Straight Line, Miles.
Naugatuck Junc. Watertown	Winsted. Waterbury.	56.55 } 4.44 }	252	34.39	26.60
Total,		60.99	252	34.39	26.60

Characteristics of Road.—*Continued.*

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate length of Descending Grades. Miles.
9.09	69	1,148	40.34	45	236	11.56

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Stone,	5	57	..	9	..	14	..
Iron,	26	1,600	..	12	..	293	..
Wooden,	18	798	..	8	..	102	..
Total,	49	2,455	..	..	..	.	..
Trestles,	13	2,708	..	25	..	954	..

OVERHEAD HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:			
Bridges,	4	16	.01

GAUGE OF TRACK—4 feet, 8½ inches; 60.99 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Name of Owner.	Name of Operating Company.
60.99	Western Union Telegraph Co.	Western Union Telegraph Co.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, William D. Bishop, President, and William L. Squire, Treasurer, of the Naugatuck Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

WM. D. BISHOP,
President.

WILLIAM L. SQUIRE,
Treasurer.

Subscribed and sworn to by Wm. D. Bishop before me this 27th day of August, 1894.

A. S. MAY,
Notary Public.

Subscribed and sworn to by William L. Squire before me this 23d day of August, 1894.

AVERY CLARK,
Notary Public.

NEW HAVEN & DERBY RAILROAD CO.

History.

Name of common carrier making this report? New Haven & Derby Railroad Company.

Date of organization? August 24, 1867.

Under laws of what Government, State, or Territory organized? General railroad laws of Connecticut.

What carrier operates the road of this company? New York, New Haven & Hartford Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
J. PIERPONT MORGAN,	New York, N. Y.,	October 24, 1894.
WM. ROCKEFELLER,	" "	" "
CHARLES P. CLARK,	New Haven, Conn.,	" "
JOHN M. HALL,	" "	" "
WM. E. BARNETT,	" "	" "
S. E. MERWIN,	" "	" "
N. D. SPERRY,	" "	" "
FRANKLIN FARREL,	Ansonia, Conn.,	" "
THOMAS WALLACE,	" "	" "

Total number of stockholders at date of last election. 107.

Date of last meeting of stockholders for election of directors. Oct. 25, 1893.

Post-office address of general office. New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed. C. E. Robinson, Treasurer, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	JOHN M. HALL,	New Haven, Conn.
Vice-President,	CHARLES P. CLARK,	" "
Secretary,	WM. E. BARNETT,	" "
Treasurer,	C. E. ROBINSON,	" "

Property Leased or Otherwise Assigned for Operation.

Name of Railroad the income of which from lease or from other assignment for operation, is included in the Income Account (p. 205):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
New Haven & Derby Railroad.	New Haven	Ansonia.	New York, New Haven & Hartford R. R. Co.	Lease.	12.90
	Derby	Huntington.			3.79
Total Mileage,					16.69

Contract Existing between this Road and the Company by which it is Operated.

All the railroad and property of the company leased to the New York, New Haven & Hartford Railroad Company for ninety-nine years from July 1, 1892.

Annual rental, 3 per cent. dividends on Capital Stock to and including June 30, 1895, and 4 per cent. thereafter during term of lease, interest on funded debt, all taxes and assessments.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	7,000	\$100.00	\$700,000.00	\$447,000,000	3 per ct.	\$13,410.00

Manner of Payment for Capital Stock.	Total Number of Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common,	4,470	\$447,000.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
First Mortgage,	1870	1900	\$225,000.00	\$225,000.00	\$225,000.00	\$225,000.00
Consolidated Mtg.,	1888	1918	800,000.00	575,000.00	575,000.00	575,000.00
Mtg. Certificates,	1888	1900	480,000.00	480,000.00	480,000.00	480,000.00
Grand Total,	.....	.....	1,505,000.00	1,280,000.00	1,280,000.00	1,280,000.00

Funded Debt.—Continued.**INTEREST.**

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
7 per cent.	February and August.	\$15,750.00	\$15,750.00
5 per cent.	May and November.	28,750.00	28,750.00
6 per cent.	February and August.	28,800.00	28,800.00
Total, . . .	.....	\$73,300.00	\$73,300.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mtge. Bds. (p. 204),	\$1,280,000.00	\$1,280,000.00	\$73,300.00	\$73,300.00

Recapitulation.

For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 203),	\$447,000.00	\$447,000.00	16.69	\$26,782.50
Bonds (p. 203), . .	1,280,000.00	1,280,000.00	16.69	76,692.62
Total,	\$1,727,000.00	\$1,727,000.00	....	\$103,475.12

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction—Total to June 30, 1888,	\$1,267,951.90	\$1,267,951.90	\$75,970.75
Right of Way,	19,188.67	19,188.67	1,149.71
Other Real Estate,	247,620.88	720.00	43.14
Fences,	101.49	101.49	6.08
Grading, Bridge and Culvert Masonry,	47,800.42	47,800.42	2,864.01
Bridges and Trestles,	3,693.82	3,693.82	221.31
Rails,	27,990.23	27,990.23	1,677.06
Ties,	19,035.38	19,035.38	1,140.52
Other Superstructure,	28,229.17	28,229.17	1,691.98
Buildings, Furniture, and Fixtures, .	16,832.34	16,832.34	1,008.53
Shop Machinery and Tools,	10,080.95	10,080.95	604.01
Engineering Expenses,	12,456.46	12,456.46	746.34
Interest during Construction, . . .	2,273.71	2,273.71	136.23
Disc. on Securities Sold for Construction,	27,500.00	27,500.00	1,647.69
Terminal Facilities and Elevators, .	5,545.00	5,545.00	332.23
Road built by Contract,	55,007.76	55,007.76	3,295.85
Other items,	14,973.80	14,973.80	897.17
Total Construction,	\$1,806,291.98	\$1,559,391.10	\$93,432.61
Equipment—Total to June 30, 1888, .	180,999.31	180,999.31	10,844.77
Locomotives,	19,676.31	19,676.31	1,178.93
Total Equipment,	\$200,675.62	\$200,675.62	\$12,023.70
Total cost Construction, Equipm't, etc.,	\$2,006,967.60	\$1,760,066.72	\$105,456.31

Income Account.

Income from Lease of Road,	\$86,710.00	
Total Income,		\$86,710.00
Deductions from Income:		
Interest on Funded Debt accrued (p. 204), . .	\$73,300.00	
Total Deductions from Income,		73,300.00
Net Income,		\$13,410.00
Dividends, 3 per cent., Common Stock (p. 203), .		13,410.00
Surplus on June 30, 1893, [from "General Balance Sheet," 1893 Report],		\$3,540.06
Additions for Year,		6,172.49
Surplus on June 30, 1894, [for entry on "General Balance Sheet"],		\$9,712.55

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Decrease, Year ending June 30, 1894.
\$1,806,291.98	Cost of Road (p. 205),	\$1,559,391.10	\$246,900.88
200,675.62	Cost of Equipment (p. 205),	200,675.62	
\$2,006,967.60	Grand Total,	\$1,760,066.72	\$246,900.88

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase, Year ending June 30, 1894.	Decrease, Year ending June 30, 1894.
\$447,000.00	Capital Stock (p. 203),	\$447,000.00		
1,526,900.88	Funded Debt (p. 203),	1,280,000.00		\$246,900.88
29,526.00	Accrued Interest on Funded Debt not yet payable,	23,354.17		6,172.49
3,540.06	Profit and Loss,	9,712.55	\$6,172.49	
\$2,006,967.60	Grand Total,	\$1,760,066.72	\$6,172.49	\$253,073.37

Important Changes during the Year.

Disposed of real estate amounting to \$246,900.88, and retired an equal amount of "Real Estate Certificates," being the balance of amount issued.

Contracts, Agreements, etc.

All contracts are by Lessee Company.

Security for Funded Debt (p. 203).

Class of Bond or Obligation.	What Road Mortgaged.	Miles.	Amount of Mortgage per Mile of Line.	What Equipment Mortgaged.	What Income and Securities Mortgaged.
First Mortgage,	Entire Line.	16.69	\$13,481.13	All.	None.
Consol. Mortgage,	" "	16.69	34,451.77	"	"
Mortgage Certifs.,	" "	16.69	28,759.73	"	"

Mileage.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	Steel Rails.
	Main Line.	Branches and Spurs.		
Connecticut,	12.90	3.79	16.69	16.69

Characteristics of Road.

Included in report of Lessee Company.

BRIDGES, TRESTLES, TUNNELS, ETC.

Included in report of Lessee Company.

GAUGE OF TRACK—4 feet, 8½ inches; 16.69 miles.

Telegraph.

Included in report of Lessee Company.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, John M. Hall, President, and C. E. Robinson, Treasurer, of the New Haven & Derby Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

JOHN M. HALL,

President.

C. E. ROBINSON,

Treasurer.

Subscribed and sworn to before me this 22d day of August, 1894.

AVERY CLARK,

Notary Public.

NEW HAVEN & NORTHAMPTON COMPANY.

History.

Name of common carrier making this report: The New Haven & Northampton Company.

Date of organization: 1862.

Under laws of what Government, State, or Territory organized?

Under the laws of the States of Massachusetts and Connecticut. (Massachusetts Special Laws, vol. xi, pp. 286, 653; vol. xii, pp. 25, 736, 822; vol. xiii, p. 484; vol. xiv, pp. 386, 485, 623; vol. xv, pp. 677, 1430. Connecticut Private Laws, vol. v, pp. 460, 724. Connecticut Special Laws, vol. vi, pp. 217, 303, 733; vol. vii, pp. 267, 871, 987; vol. viii, pp. 296, 419, 420. Connecticut Private Acts 1870, pp. 146, 198. Connecticut Special Acts 1875, p. 130. Connecticut Special Acts 1876, p. 119.)

If a consolidated company, name the constituent companies.

The constituent companies were the original New Haven & Northampton Company (Massachusetts Special Laws, vol. vii, pp. 675, 691. Connecticut Private Laws, vol. i, p. 308; vol. iii, p. 294; vol. iv, pp. 1384, 888, 892-3-4 and 5. Connecticut Private Acts, 1847, p. 104.)

The Hampden Railroad Company (Massachusetts Special Laws, vol. ix, p. 546). The Northampton & Westfield Railroad Corporation (Massachusetts Special Laws, vol. ix, p. 561). The Hampshire & Hampden Railroad Corporation (Massachusetts Special Laws, vol. ix, pp. 767, 773; vol. x, pp. 552, 742, 922), and the Farmington Valley Railroad Company (Private Laws of Connecticut, vol. iv, pp. 893, 896. Connecticut Private Acts 1858, p. 125; 1862, p. 94; 1867, p. 275).

Date and authority for each consolidation:

In 1853, The Hampden Railroad Company with the Northampton & Westfield Railroad Corporation forming the Hampshire & Hampden Railroad Corporation. In 1862, The Hampshire & Hampden Railroad Corporation with the original New Haven & Northampton Company, and also in 1862, with The Farmington Valley Railroad Company. For authority for each consolidation see Acts cited above.

If a reorganized company, give name of original corporation and refer to laws under which it was organized.

Originally in Connecticut. "The President, Directors, and Company of the Farmington Canal Company" (Private Laws of Connecticut, vol. i, pp. 300, 307, 308, 318), and in Massachusetts "The Hampshire & Hampden Canal Company" (Massachusetts Special Laws, vol. vi, pp. 40, 320, 702, 829; also vol. vii, p. 186.

What carrier operates the road of this company? The New York, New Haven & Hartford Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
CHARLES N. YEAMANS,	Westfield, Mass.,	January 2, 1895.
GEORGE J. BRUSH,	New Haven, Conn.,	" "
HORATIO G. KNIGHT,	Easthampton, Mass.,	" "
CHARLES M. POND,	Hartford, Conn. (Dead),	" "
CHARLES P. CLARK,	New Haven, Conn.,	" "
A. HEATON ROBERTSON,	" "	" "
JOHN M. HALL,	" "	" "
SAMUEL E. MERWIN,	" "	" "
FAYETTE S. CURTIS,	" "	" "

Total number of stockholders at date of last election. 52.

Date of last meeting of stockholders for election of directors. January 3, 1894.

Post-office address of general and operating office. New Haven, Conn., Railroad office building.

Name and address of officer to whom correspondence regarding this report should be addressed. Edward A. Ray, Secretary and Treasurer, New Haven, Railroad office building.

Officers.

Title.	Name.	Location of Office.
President,	CHARLES N. YEAMANS,	Westfield, Mass.
Vice-President,	JOHN M. HALL,	New Haven, Conn.
Secretary and Treasurer,	EDWARD A. RAY,	" "

Operated by officers of New York, New Haven & Hartford Railroad Co.

Property Operated.

Leased to and operated by the New York, New Haven & Hartford Railroad Company.

Property Leased, or otherwise Assigned for Operation.

Name of Railroad the income of which from lease, or from other assignment for operation, is included in the Income Account (p. 213):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
New Hav. & Northampton,	New Haven,	Conway Junc.,	N. Y., N. H. & H. R. R. Co.	Lease for 99 years.	94.64
Collinsville Branch,	Farmington,	New Hartford,	" " "	"	14.09
Williamsburg Branch,	Northampton,	Williamsburg,	" " "	"	7.51
Turners Falls Branch,	So. Deerfield,	Turners Falls,	" " "	"	10.07
And the leased Holyoke & Westfield,	Westfield,	Holyoke,	" " "	"	10.32
Total Mileage,	.	.	.	.	136.63

**Contract existing between this Road and the Company by which
it is operated.**

Leased to the New York, New Haven & Hartford Railroad Company for 99 years from the first day of April, 1887, at one per cent. on the capital stock for three years; two per cent. for the second three years; three per cent. for the third three years, and four per cent. thereafter, and interest on bonds issued or guaranteed by Lessor, also all taxes, rates, etc., imposed or assessed.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	50,000	\$100.00	\$5,000,000	*\$2,460,000.00	3 per ct	\$73,800.00

* \$2,403,500 of above has been surrendered and exchanged for stock of the New York, New Haven & Hartford Railroad Co.

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash (approximate):		
Common,	18,820	\$1,882,000.00
Issued for Construction (approximate):		
Common,	5,780	578,000.00
Total,	24,600	\$2,460,000.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
First Mortgage,	1869	1899	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000
Mtge. & Sinking Fund,	1879	1909	1,200,000	1,200,000	1,200,000	1,200,000
Northern Extension,	1881	1911	700,000	700,000	700,000	700,000
Convertible,	1886	1896	700,000	700,000	700,000	700,000
Total, . . . . .	.....	.....	\$3,900,000	\$3,900,000	\$3,900,000	\$3,900,000

Funded Debt.—Continued.

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
7 per cent.	January and July.	\$91,000.00	\$91,000 00
6 per cent.	April and October.	72,000.00	72,000.00
5 per cent.	April and October.	35,000.00	35,000.00
5 per cent.	January and July.	35,000.00	35,000.00
Total,	.....	\$233,000.00	\$233,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mortgage Bonds (p. 210),	\$3,200,000.00	\$3,200,000.00	\$198,000.00	\$198,000.00
Convertible Bds. (p. 210),	700,000.00	700,000.00	35,000.00	35,000.00
Total,	\$3,900,000.00	\$3,900,000.00	\$233,000.00	\$233,000.00

Current Assets and Liabilities.

Cash and Current Assets available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$973.29	Cash Assets, \$973.29

Recapitulation.

a. For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 210),	\$2,460,000.00	\$2,460,000.00	126.31	\$19,475.89
Bonds (p. 210),	3,900,000.00	3,900,000.00	126.31	30,876 41
Total,	\$6,360,000.00	\$6,360,000.00	126.31	\$50,352.30

Recapitulation.—*Continued.*

b. For mileage operated by road making this report (trackage rights excluded), the operations of which are included in the Income Account (p. 213):

Leased to and operated by the New York, New Haven & Hartford Railroad Company.

*** Cost of Road, Equipment, and Permanent Improvements.**

Item.	Total Cost to October 1, 1887.	Total Cost to June 30, 1894.	Cost per Mile.
Construction:			
Right of Way,	\$548,131.12		
Other Real Estate,			
Fences,			
Grading, Bridge and Culvert Masonry,	1,964,441.10		
Bridges and Trestles,	261,034.72		
Rails,	1,408,730.21		
Ties,			
Other Superstructure,			
Buildings, Furniture, and Fixtures,	211,280.06		
Shop Machinery and Tools,	62,175.41		
Engineering Expenses,	114,778.39		
Interest during Construction,	291,124.30		
Wharfing etc.,	119,309.56		
Sidings and Yard Extensions,	213,649.75		
Purchase of constructed road,	536,932.00		
Total Construction,	\$5,731,586.62	\$5,731,586.62	\$45,380.00
Equipment:			
Locomotives,	317,419.96		
Passenger Cars,	136,405.59		
Sleeping, Parlor, and Dining Cars,			
Baggage, Express, and Postal Cars,			
Combination Cars,			
Freight Cars,	392,351.51		
Other Equipment,	10,253.56		
Total Equipment,	\$850,430.62	\$850,430.62	\$6,733.00
Total Cost Construction, Equipment, etc.,	\$6,582,017.24	\$6,582,017.24	\$52,113.00

* Since October, 1887, this company has made no additions to this account.

Income Account.**Income from Lease of Road:**

Interest on Bonds,	\$233,000.00
Dividend on Stock,	73,800.00
Rent of H. & W. Railroad,	26,611.19
Sinking Fund, two payments,	15,000.00
Dividend on Stock Owned p. 213),	1,050.00

Total Income, \$349,461.19

Deductions from Income:

Salaries and Maintenance of Organization,	\$723.60
Interest on Funded Debt accrued (p. 211),	233,000.00
Rents paid for lease of road (p. 214),	26,611.19

Total Deductions from Income, \$260,334.79

Net Income, \$89,126.40

Dividends, 3 per cent., Common Stock, \$73,800.00

Surplus from operations of Year ending June 30, 1894, *\$15,326.40

Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report], 453,664.13

Surplus on June 30, 1894 [for entry on "General Balance Sheet"], \$468,990.53

* Including the \$15,000 added to Sinking Fund by the Lessees.

Earnings from Operation.

Reported by Lessees.

Stocks Owned.**a. Railway Stocks:**

Name.	Total Par Value.	Rate.	Income or Dividend Received.	Valuation.
Holyoke & Westfield Railroad Co.,	\$20,000.00	5%	\$1,000.00	\$20,000.00

b. Other Stocks:

Name.	Total Par Value.	Rate.	Income or Dividend Received.	Valuation.
Southington Water Company, .	1,000.00	5%	50.00	1,000.00
Grand Total, a and b, .	\$21,000.00	....	\$1,050.00	\$21,000.00

Operating Expenses.

Reported by Lessees.

Rentals Paid.

Rents paid for lease of road:

Name of Road.	Interest on Bonds Guaranteed.	Cash. 50 per cent. earnings.	Total.
Holyoke & Westfield R. R.,	\$11,600.00	\$15,011.19	\$26,611.19

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$5,731,586.62	Cost of Road (p. 212),	\$5,731,586.62	.....
850,430.62	Cost of Equipment (p. 212),	850,430.62	.....
21,000.00	Stocks Owned (p. 213),	21,000.00	.....
646.89	Cash and Current Assets (p. 211),	973.29	\$326.40
210,000.00	Sinking Fund,	225,000.00	15,000.00
\$6,813,664.13	Grand Total,	\$6,828,990.53	\$15,326.40

Total June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$2,460,000.00	Capital Stock (p. 210),	\$2,460,000.00	.....
3,900,000.00	Funded Debt (p. 210),	3,900,000.00	.....
453,664.13	Profit and Loss,	468,990.53	*\$15,326.40
\$6,813,664.13	Grand Total,	\$6,828,990.53	\$15,326.40

* Including \$15,000 added to Sinking Fund.

Important Changes during the Year.

Changes, extensions, etc., made by Lessees.

Contracts, Agreements, etc.

Operated by Lessees.

Security for Funded Debt (page 210).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.	What Equipment Mortgaged.	What Income or Securities Mortgag'd.
	From—	To—	Miles.			
First Mortgage Bonds, (\$1,300,000),	New Haven	Northampton.	76.33	\$25,400.85	All.	None.
Consol. Mort. and Sinking Fund (\$1,200,000),	Farmington	New Hartford.	14.09			
	2d Mortgage on	above and	7.51	12,295.08		
	1st Mortgage on	Williamsburg				
Northern Extension, (\$700,000),	Northampton	Conway Junc.	18.31	24,665.25		
	So. Deerfield	Turner's Falls.	10.07			

Total Mortgage on Road and Equipment (Main Line and Branches), \$3,200,000; 126.31 miles.
 Amount of mortgage per mile of line, \$25,330.45.

Employes and Salaries.

Operated by officers of New York, New Haven & Hartford Railroad Co

Passenger, Freight, and Train Mileage.

Reported by Lessees.

Freight Traffic Movement.

Reported by Lessees.

Description of Equipment.

Reported by Lessees.

Mileage.

- a. Mileage of road operated (single track): Operated by Lessees.
- b. Mileage of line operated by States and Territories (single track): Operated by Lessees.
- c. Mileage of line owned by States and Territories (single track):

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.
	Main Line.	Branches and Spurs.	
Massachusetts, . . .	43.38	17.58	60.96
Connecticut, . . .	51.26	14.09	65.35
Total mileage owned,	94.64	31.67	126.31

Renewals of Rails and Ties.

Reported by Lessees.

Accidents to Persons.

Reported by Lessees.

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
			Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
From—	To—	Miles.			
New Haven, Conn.,	Conway Junc., Mass.	94.64	159	24.16	70.48
Northampton, Mass.,	Williamsburg, Mass.	7.51	25	3.20	4.31
So. Deerfield, Mass.,	Turners Falls, Mass.	10.07	16	2.14	7.93
Farmington, Conn.,	New Hartford, Conn.	14.09	44	7.71	6.38
Holyoke & Westfield, Mass.,	Holyoke, Mass.	10.32	15	2.05	8.27
Total,		136.63	259	39.26	97.37

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate Length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate Length of Descending Grades. Miles.
30.48	57	1,038	37.74	49	800	26.42
.37	3	368	7.14			
4.54	8	81	2.81	5	116	2.72
2.30	12	243	9.33	6	67	2.46
3.14	5	190	3.63	2	225	3.55
40.83	85	1,910	60.65	62	1,208	35.15

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Stone, .	31	457	3	8	..	14	..
Iron, .	77	5,013	7	14	..	600	..
Wooden, .	8	545	..	8	..	370	..
Total, .	116	6,015	10	..	..	..	..

Characteristics of Road.—*Continued.***HIGHWAY CROSSINGS.**

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:—Bridges, .	30	14	..
Conduits,	1	14	3
Total,	31	..	..
Overhead Railway Crossings:—Bridges, . .	4	14	..

GAUGE OF TRACK—4 feet, 8½ inches; 126.31 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
126.31	126.31	Western Union Telegraph Co.	Western Union Telegraph Co.

Car Mileage.

Reported by Lessees.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, Charles N. Yeamans, President, and Edward A. Ray, Treasurer, of the New Haven & Northampton Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

CHAS. N. YEAMANS, *President.*

EDWARD A. RAY, *Treasurer.*

Subscribed and sworn to before me this 3d day of September, 1894.

C. H. LEWIS, *Notary Public.*

NEW LONDON NORTHERN RAILROAD COMPANY.

Name of common carrier making this report? New London Northern Railroad Company.

Date of organization? May 31, 1860.

Under laws of what Government, State, or Territory organized? Massachusetts and Connecticut.

What carrier operates the road of this company? Central Vermont Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
ROBERT COIT,	New London, Conn.,	February 5, 1895.
AUGUSTUS BRANDAGEE,	" "	" "
JONATHAN M. HARRIS,	" "	" "
C. A. WILLIAMS,	" "	" "
C. H. OSGOOD,	Norwich, "	" "
JEREMIAH HALSEY,	" "	" "
THOMAS RAMSDELL,	Windham, "	" "
JAMES A. RUMRILL,	Springfield, Mass.,	" "
THOMAS B. EATON.	Worcester, "	" "

Date of last meeting of stockholders for election of directors? Feb. 7, 1894.

Post-office address of general office? New London, Conn.

Post-office address of operating office? St. Albans, Vt.

Name and address of officer to whom correspondence regarding this report should be addressed? J. A. SOUTHARD, Secretary, New London, Conn.

Officers.

Title.	Name.	Location of Office.
President,	ROBERT COIT,	New London, Conn.
Secretary,	J. A. SOUTHARD,	" "
Treasurer,	ROBERT COIT,	" "
Attorney or General Counsel,	AUGUSTUS BRANDAGEE,	" "
General Auditor,	M. M. REYNOLDS,	St. Albans, Vt.
General Superintendent,	F. W. BALDWIN,	" "
Superintendent,	D. MACKENZIE,	New London, Conn.
Superintendent of Telegraph,	M. MAGIFF,	St. Albans, Vt.
General Freight Agent,	E. A. CHITTENDEN,	" "
Division Freight Agent,	J. A. SOUTHARD,	New London, Conn.
General Passenger Agent,	S. W. CUMMINGS,	St. Albans, Vt.
Division Passenger Agent,	J. A. SOUTHARD,	New London, Conn.

Property Operated.

Name of every railroad the operations of which are included in the Income Account (p. 222):

Name.	TERMINALS.		Miles of Line for each class of roads named.
	From—	To—	
New London Northern,	New London, Conn.,	Miller's Falls, Mass.	100

Property Leased, or Otherwise Assigned for Operation.

Name of railroad, the income of which from lease, or from other assignment for operation, is included in the Income Account (p. 220):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
New London Northern,	New London, Conn.,	Brattleboro, Vt	Cent. Vermont,	Lease.	121
Brattleboro & Whitehall,	Brattleboro, Vt.	Londonderry, "	Cent. Vermont,	Lease.	36
Total Mileage,	.	.	.	.	157

Contract Existing between this Road and the Company by which it is Operated.

Leased by Central Vermont Railroad Company for ninety-nine years from December 1, 1891, at a rental of \$211,000 per annum.

Capital Stock.

(Company's Account.)

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	20,000	\$100.00	\$2,000,000	\$1,500,000	8 and 9%	\$127,500

Capital Stock.—Continued.

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common, . . . . .	.....	\$340,673.33
Issued for Bonds, . . . . .	.....	1,102,660.00
Issued for Stock of Amherst, Palmer & Belcher- town R. R., . . . . .	.....	56,666.67
Total,	15,000	\$1,500,000.00

Funded Debt.

(Company's Account.)

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
Consolidated,	1880	1910	\$1,500,000	\$812,000	\$812,000	\$847,066.65
Consolidated,	1885	1910		300,000	300,000	304,530.00
Consolidated,	1892	1910		388,000	388,000	393,877.00
Total, . . . . .	.....	.....	\$1,500,000	\$1,500,000	\$1,500,000	\$1,545,473.65

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
5 per cent.	January and July.	\$40,600.00	\$40,600.00
4 per cent.	January and July.	12,000.00	12,000.00
4 per cent.	January and July.	15,520.00	15,520.00
.....	.....	\$68,120.00	\$68,120.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mort. Bonds(p.220),	\$1,500,000 00	\$1,500,000.00	\$68,120.00	\$68,120.00

Current Assets and Liabilities.

Cash and Current Assets available for Payment of Current Liabilities.		Current Liabilities Accrued to and Including June 30, 1894.	
Cash,	\$74,725.72.	Audited vouchers and accounts,	\$8.33
		Dividends not called for,	1,322.50
		Matured interest coupons unpaid,	399.34
		Balance—Cash Assets,	72,995.55
Total,	\$74,725.72	Total,	\$74,725.72

Recapitulation.

For mileage owned by road making this report :

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 219),	\$1,500,000.00	\$1,500,000.00	121	\$12,396.69
Bonds (p. 220),	1,500,000.00	1,500,000.00	121	12,396.69
Total,	\$3,000,000.00	\$3,000,000.00	....	\$24,793.38

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction,	\$2,978,951.51	\$2,978,951.51	\$24,619.43
Equipment,	248,420.44	248,420.44	2,053.06
Total Cost Construction, etc.,	\$3,227,371.95	\$3,227,371.95	\$26,672.49

Income Account.

(Lessee's Account.)

Gross Earnings from Operation (p. 223),	\$604,344.84	
Less Operating Expenses,	412,681.62	
Income from Operation,		\$191,663.22
Miscellaneous Income, less Expenses (p. 223),		40,289.13
Total Income,		<u>\$231,952.35</u>

Deductions from Income:

Interest on Interest-bearing Current Liabilities,

Accrued, not otherwise provided for, \$1,161.77

Rents paid for lease of road, 167,833.33

Taxes, 31,616.64

Total Deductions from Income, 200,611.74

Net Income, \$31,340.61Surplus from Operations of Year ending June 30, 1894, \$31,340.61**Income Account.**

(Company's Account.)

Income from Lease of Road,	\$211,000.00	
Interest,	345.66	
Total Income,		\$211,345.66

Deductions from Income:

Salaries and maintenance of Organization, \$3,374.44

Interest on Funded Debt accrued (p. 220), 68,120.00

Total Deductions from Income, 71,494.44

Net Income, \$139,851.22

Dividends, 8 and 9 per cent, Common Stock (p. 219), 127,500.00

Surplus from operations of year ending June 30, 1894, \$12,351.22

Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report], \$558,281.65

Additions for year, 12,351.22

Surplus on June 30, 1894 [for entry on "General Balance Sheet," p. 225], \$570,632.87

Earnings from Operation.

(Lessee's Account.)

Item.	Total Receipts.	Deductions, Account of Re- payments, etc.	Actual Earnings.
Passenger: Passenger Revenue,	\$217,190.85		
Less Repayments: Tickets redeemed,		\$125.22	
Excess Fares refunded,		2,438.90	
Total Deductions,		\$2,564.12	
Total Passenger Revenue,			\$214,626.73
Mail,			15,095.70
Express,			15,250.42
Extra Baggage and Storage,			1,816.04
Total Passenger Earnings,			\$246,788.89
Freight: Freight Revenue,	359,876.39		
Less Repayments:			
Overcharge to shippers,		\$2,320.44	
Total Deductions,		\$2,320.44	
Total Freight Revenue,			357,555.95
Total Freight Earnings,			\$357,555.95
Total Gross Earnings from Operation — Entire Line,			\$604,344.84

Bonds Owned.

(Company's Account.)

Name.	Total Par Value.	Rate.
Brattleboro & Whitehall R. R. (not issued),	\$150,000.00	6 per cent.

Miscellaneous Income.

(Lessee's Account.)

Item.	Gross Income.	Net Miscel. Income.
Rent of buildings,	\$40,289.13	\$40,289.13

Operating Expenses.

(Lessee's Account.)

Item.	Amount.
Maintenance of Way and Structures:	
Repairs of Roadway,	\$32,071.76
Renewals of Ties,	8,793.85
Repairs of Bridges and Culverts,	3,709.38
Repairs of Fences, Road-crossings, Signs, and Cattle Guards,	1,967.19
Repairs of Buildings,	2,678.57
Repairs of Docks and Wharves,	923.19
Repairs of Telegraphs,	22.74
Other expenses,	7,732.40
Total,	\$57,899.08
Maintenance of Equipment:	
Repairs and Renewals of Locomotives,	14,963.32
Repairs and Renewals of Passenger Cars,	4,732.40
Repairs and Renewals of Freight Cars,	11,040.67
Shop Machinery, Tools, etc.,	1,601.82
Other Expenses,	4,272.71
Total,	\$36,610.92
Conducting Transportation:	
Wages of Enginemen, Firemen, and Roundhouse men,	39,199.36
Fuel for Locomotives,	80,547.35
Water-supply for Locomotives,	1,796.41
All other Supplies for Locomotives,	2,337.26
Wages of other Trainmen,	39,909.37
All other train supplies,	2,052.73
Wages of Switchmen, Flagmen, and Watchmen,	4,106.61
Expenses of Telegraph, incl. Train Dispatchers and Operators,	6,020.32
Wages of Station Agents, Clerks, and Laborers,	63,731.17
Station Supplies,	3,775.49
Car Mileage—Balance,	32,715.71
Loss and Damage,	2,905.45
Injuries to persons,	4,030.21
Other expenses,	11,897.44
Total,	\$295,024.88
General Expenses:	
Salaries of Officers,	4,843.30
Salaries of Clerks,	5,462.60
General Office Expenses and Supplies,	178.12
Agencies, including Salaries and Rent,	789.30
Advertising,	1,284.40
Insurance,	2,291.78
Rents not otherwise provided for,	1,799.47
Legal Expenses,	2,689.78
Stationery and Printing,	3,785.51
Other General Expenses,	22.48
Total,	\$23,146.74

Operating Expenses.—Continued.

Item.	Amount.
Recapitulation of Expenses:	
Maintenance of Way and Structures,	\$57,899.08
Maintenance of Equipment,	36,610.92
Conducting Transportation,	295,024.88
General Expenses,	23,146.74
Grand Total,	\$412,681.62

Percentage of Expenses to Earnings, — entire line, 68.2.

Rentals Paid.

(Lessee's Account.)

Rents paid for lease of road:

Name of Road.	Cash.	Total.
New London Northern, N. London to Miller's F'ls,	\$167,833.33	\$167,833.33

Comparative General Balance Sheet.

(Company's Account.)

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$2,978,951.51	Cost of Road (p. 221),	\$2,978,951.51		
248,420.44	Cost of Equipment (p. 221),	248,420.44		
150,000.00	Bonds Owned (p. 220),	150,000.00		
93,170.00	Other Permanent Invest- ments, Steam'b't property,	93,170.00		
62,962.24	Cash and Current Assets, .	74,725.72	\$11,763.48	
27,071.13	Other Assets: Sundries,	27,095.37	24.24	
\$3,560,575.32	Grand Total,	\$3,572,363.04	\$11,787.72	

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$1,500,000.00	Capital Stock (p. 219), .	\$1,500,000.00		
1,500,000.00	Funded Debt (p. 220), .	1,500,000.00		
2,293.67	Current Liabilities (p. 221),	1,730.17		\$563.50
558,281.65	Profit and Loss (p. 222), .	570,632.87	\$12,351.22	
\$3,560,575.32	Grand Total,	\$3,572,363.04	\$12,351.22	\$563.50

Contracts, Agreements, etc.

Express Companies — American — A mileage proportion of a named sum paid to the Central Vermont Railroad Co. for service over the entire system.

Mails — A mileage proportion of the amount paid the Central Vermont Railroad Co. for transportation between New London and Brattleboro.

Security for Funded Debt (p. 220).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From—	To—	Miles.	
Consolidated,	New London,	Brattleboro.	121	\$12,396.69

Employees and Salaries.

(Lessee's Account.)

Class.	Num-ber.	Total No. of Days Worked.	Total Yearly Compensation.	Av. Daily Compensation.
General Officers,	2	626	\$3,916.62	\$6.25
General Office Clerks,	5	1,565	4,018.38	2.56
Station Agents,	59	18,467	35,187.50	1.90
Other Station Men,				
Enginemen,	28	8,764	27,328.54	3.11
Firemen,	22	6,886	12,863.22	1.86
Conductors,	79	24,727	43,190.84	1.74
Other Trainmen,				
Machinists,	12	3,756	8,195.10	2.18
Carpenters,	13	4,069	8,171.28	2.00
Other Shopmen,	12	3,756	6,557.34	1.74
Section Foremen,	93	29,109	35,105.97	1.20
Other Trackmen,				
Telegraph Operators and Dispatchers, . .	5	1,565	3,616.02	2.31
All other Employes and Laborers, . . .	122	38,186	47,739.96	1.25
Total (including "General Officers"),	452	141,476	\$235,840.77	....
Less "General Officers,"	2	626	3,916.62	....
Total (excluding "General Officers"),	450	140,850	\$231,924.15	....
Distribution of Above :				
General Administration,	7	2,191	7,935.00	....
Maintenance of Way and Structures, . .	106	33,178	43,277.25	....
Maintenance of Equipment,	24	7,512	14,752.44	....
Conducting Transportation,	315	98,595	169,876.08	....
Total (including "General Officers") —	450	140,850	\$231,924.15	....
Entire Line,				

Passenger, Freight, and Train Mileage.

(Lessee's Account.)

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	615,349			
No. of passengers carried one mile,	8,701,798			
No. of pass. car'ed one mile per mile of road,	6,153			
Average distance carried,	14 miles.			
Total passenger revenue,		214,626	73	
Average am't received from each passenger,			34	8
Average receipts per passenger per mile,			02	4.66
Total passenger earnings,		246,788	89	
Passenger earnings per mile of road,		2,467	89	
Passenger earnings per train mile,			95	8
Freight Traffic:				
No. of tons carried of freight earning rev.,	559,852			
Number of tons carried one mile,	27,870,245			
Average distance haul of one ton,	49.7			
Total freight revenue,		357,555	95	
Average am't rec'd for each ton of freight,			63	8
Average receipts per ton per mile,			01	2.8
Total freight earnings,		357,555	95	
Freight earnings per mile of road,		3,575	85	
Freight earnings per train mile,		1	61	7
Passenger and Freight:				
Passenger and freight revenue,		572,182	68	
Pass. and freight revenue per mile of road,		5,721	83	
Passenger and freight earnings,		604,344	84	
Pass. and freight earnings per mile of road,		6,043	45	
Gross earnings from operation,		604,344	84	
Gross earn'gs from operat'n per mile of road,		6,043	45	
Gross earn'gs from operation per train mile,		1	26	2.6
Operating expenses,		412,681	62	
Operating expenses per mile of road,		4,126	82	
Operating expenses per train mile,			86	5
Income from operation,		31,340	61	
Income from operation per mile of road,		313	41	
Train Mileage:				
Miles run by passenger trains,	257,894			
Miles run by freight trains,	221,042			
Total Mileage Trains Earning Revenue,				
	478,936			
Miles run by switching trains,				
	184,367			
Miles run by construction and other trains,				
	111,930			
Grand Total Train Mileage,				
	775,233			

Description of Equipment.

(Lessee's Account.)

Item.	Total Number at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
		No.	Name.	No.	Name
Locomotives:					
Passenger,	12	12	Westinghouse.		
Freight,	11	4	"		
Switching,	2	..			
Total,	25	16			
Cars in Passenger Service:					
First-class Cars, . . .	13	13	Westinghouse.	13	Miller.
Combination Cars, . .	7	7	"	7	"
Baggage, Express, and Postal Cars,	2	2	"	2	"
Total,	22	22	.....	22	
Cars in Freight Service:					
Box Cars,	124				
Flat Cars,	178				
Coal Cars,	87				
Total,	389				
Cars in Company's Service:					
Caboose Cars,	12				
Other Road Cars, . . .	9				
Total Cars in Service,	432				

Mileage.

a. Mileage of road operated :

Line in Use.	Line Represented by Capital Stock. Main Line.	Total Mileage Operated.	Iron Rails.	Steel Rails.
Miles of single track,	100.00	100.00	.....	100.00
Miles of yard track and sidings,	29.95	29.95	24.45	5.50
Total Mileage Operated (all tracks),	129.95	129.95	24.45	105.50

Mileage.—Continued.**c. Mileage of line owned by States and Territories:**

State or Territory.	Line Represented by Capital Stock. Main Line.	Total Mileage Owned.	Steel Rails.
Connecticut,	56	56	56
Massachusetts,	55	55	55
Vermont,	10	10	10
Total Mileage Owned (single track),	121	121	121

Renewals of Rails and Ties.**NEW RAILS LAID DURING YEAR.**

Kind.	Tons.	Weight per Yard.	Average price per ton at distributing point.
Steel,	94	75 lbs.	\$27.00

NEW TIES LAID DURING YEAR.

Item.	Number.	Average price at distributing point.
Chestnut,	37,000	35 cents.

Consumption of Fuel by Locomotives.

Locomotives.	Bituminous Coal—Tons.	Total Fuel Consumed— Tons	Miles Run.	Average Lbs. Consumed per Mile.
Passenger,	10,203	10,203	257,894	79
Freight,	8,592	8,592	221,042	
Switching,	7,249	7,249	184,367	
Construction,	805	805	111,930	
Total,	26,849	26,849	775,233	
Average Cost at distributing point,		\$3.00		

Accidents to Persons.

EMPLOYEES.

Kind of Accident.	Trainmen Injured.	Other Employes Injured.	Total Injured.
Coupling and Uncoupling,	7	.....	7
Falling from Trains and Engines, . .	1	.....	1
At Stations, . . . . .	.....	1	1
Total,	8	1	9

Kind of Accident.	Killed Trespassing.	Injured Trespassing.	Total Killed.	Total Injured.
At Stations, . . . . .	.....	1	.....	1
Walking on track,	2	.....	2	.....
Total,	2	1	2	1

Characteristics of Road.

BRIDGES, TRETTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:—Iron,	26	2,018	1	11	..	278	..
Wooden, .	46	2,464	2	12	4	192	5
Total, .	72	4,482	3	..	..	..	..
Trestles, .	21	2,896	10	229	..	469	..
Tunnels, .	1	75	..	..	..	..	..

Characteristics of Road.—Continued.**HIGHWAY CROSSINGS.**

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings: Bridges,	3	..	..
Overhead Railway Crossings: Bridges,	1	19	..

GAUGE OF TRACK — 4 feet, 8½ inches; 100 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
100	200	Western Union.	Central Vermont R. R.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW LONDON, } ss.

I, the undersigned, Robert Coit, President and Treasurer of the New London Northern Railroad Company, on my oath say that the foregoing return has been prepared under my direction, from the original books, papers, and records of said Company; that I have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of my knowledge, information, and belief; and I further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

ROBERT COIT,
President and Treasurer.

Subscribed and sworn to before me this 3d day of September, 1894.

JUSTUS A. SOUTHARD,
Notary Public.

RECEIVERS OF THE NEW YORK & NEW ENGLAND RAILROAD COMPANY.

History.

Name of common carrier making this report? New York & New England Railroad Company.

Date of organization? April 17, 1873.

Under laws of what Government, State, or Territory organized? States of Massachusetts, Connecticut, Rhode Island, and New York.

If a consolidated company, name the constituent companies?

Re-organization by the holders of the so-called "Berdell Mortgage Bonds" issued by the Boston, Hartford & Erie Railroad Company, in accordance with the terms of the mortgage, each bondholder being entitled to ten shares of stock of the new Company for each bond held by him.

Since the organization the New York & New England Railroad Company has not consolidated with any other company, but has purchased the Springfield & New London Railroad and become the owner by foreclosure of a mortgage of the Connecticut Central Railroad.

Date and authority for each consolidation?

Answered above.

If a reorganized company, give name of original corporation, and refer to laws under which it was organized.

Memoranda of Laws confirming the organization of the New York & New England Railroad Company and acts amendatory thereto:

MASSACHUSETTS.

Laws of 1873, chap. 289; laws of 1882, chap. 240; laws of 1888, chap. 81 and 301; laws of 1880, chap. 17; laws of 1884, chap. 85; laws of 1889, chap. 348; laws of 1880, chap. 260; laws of 1887, chap. 201; laws of 1890, chap. 340.

CONNECTICUT.

Laws of 1873, vol. 7, p. 466; laws of 1880, vol. 8, p. 353; laws of 1882, vol. 9, p. 676; laws of 1875, vol. 7, p. 913; laws of 1880, vol. 8, p. 411; laws of 1884, vol. 9, p. 999; laws of 1887, vol. 8, pp. 67 and 72; laws of 1881, vol. 9, p. 64; laws of 1889, vol. 9, p. 1107.

RHODE ISLAND.

Laws of 1873, p. 13; laws of 1882, p. 223; laws of 1884, p. 204.

Organization.

Names of Directors.	Post-Office Address.	Expiration of Term.
GORDON ABBOTT,	Boston, Mass.	March 12, 1895.
CHAS. F. ADAMS, 2d,	" "	" "
A. S. BIGELOW,	" "	" "
FRANCIS C. LOWELL,	" "	" "
A. C. TOWER,	" "	" "
S. M. WELD,	" "	" "
JOHN KEAN, JR.,	New York, N. Y.	" "
JOHN G. MOORE,	" "	" "
T. C. PLATT,	" "	" "
SAMUEL THOMAS,	" "	" "
BENJ. F. TRACY,	" "	" "
JOHN W. DOANE,	Chicago, Ill.	" "
SPENCER ERWIN,	Philadelphia, Pa.	" "
JOSEPH F. SINNOTT,	" "	" "
ARTHUR BROCK,	" "	" "
MARSDEN J. PERRY,	Providence, R. I.	" "
B. F. VAUGHAN,	" "	" "
D. S. PLUME,	Waterbury, Conn.	" "
ARTHUR SEWALL,	Bath, Me.	" "

Total number of stockholders at date of last election? 2,474.

Date of last meeting of stockholders for election of directors? March 21, 1894.

Post-office address of general office: 180 Summer Street, Boston, Mass.

Post-office address of operating office: 180 Summer Street, Boston, Mass.

Name and address of officer to whom correspondence regarding this report should be addressed:

W. H. Dudley, Auditor for Receivers, 180 Summer Street, Boston, Mass.

Officers.

Title.	Name.	Location of Office.
Vice-President,	J. T. ODELL,	180 Summer St., Boston.
Secretary,	JAMES W. PERKINS,	" "
Treas. and Treas. for		
Receivers,	GEORGE B. PHIPPEN,	" "
General Counsel,	MOORFIELD STOREY,	" "
Assistant Counsel,	FRANK A. FARNHAM,	" "
Purchasing Agent,	EDWARD MAHLER,	" "
Auditor and Auditor for		
Receivers,	W. H. DUDLEY,	" "
Paymaster,	I. W. FOSTER,	" "
General Manager and Gen.		
Manager for Receivers,	J. T. ODELL,	" "
Chief Engineer,	L. B. BIDWELL,	" "
Supt. of Transportation,	F. E. DEWEY,	" "
Division Superintendent,	F. E. DEWEY,	" "

Officers.—Continued.

Title.	Name.	Location of Office.
Division Superintendent,	T. H. FENNELL,	East Hartford, Conn.
Division Superintendent,	T. W. KENNAN,	Providence, R. I.
Master Mechanic,	THOMAS KEARSLEY,	Norwood Central, Mass.
Supt. of Telegraph,	G. L. LANG,	180 Summer St., Boston.
General Traffic Manager,	GEO. F. RANDOLF,	" "
General Freight Agent,	C. H. GOODRICH,	" "
General Passenger Agent,	W. R. BABCOCK,	" "
General Baggage Agent,	GEO. F. INGALLS,	Depot, Sum. St., Boston.
Division Freight Agent,	C. M. BOWMAN,	Hartford, Conn.
Division Freight Agent,	GEO. A. HARRIS,	Norwich, Conn.

Property Operated.

Name of every Railroad the operations of which are included in the Income Account:

1. Railroad Line represented by Capital Stock: A. Main Line. B. Branches and Spurs.
2. Proprietary Companies whose entire Capital Stock is owned by this Company.
3. Line Operated under Lease for specified sum.
4. Line Operated under Contract, or where the rent is contingent upon earnings or other considerations.
5. Line Operated under Trackage Rights.

Name.	TERMINALS.		Miles of Line for each Road Named.	Miles of Line for each Class of Roads Named.
	From —	To —		
1. A. New York & N. England,	Boston,	Hopewell Junc.,	214.93	
	Wicopee,	Fishkill Landing,	1.71	216.69
B. New York & N. England,	Providence,	Willimantic,	58.32	
	Cook St., Newton,	Woonsocket,	28.67	
	East. Thompson,	Southbridge,	17.36	
	East Hartford,	Jc. B. & A. Spfld.,	27.48	
	Melrose,	West St., Rockvl.,	7.22	
	Dedham Junc.,	Dedham,	1.53	
	Islington,	Dedham,	2.00	
	Dorrance St. Tr'k,	Providence,	.62	
	Freight Branch,	Hartford,	.67	143.87
3. Norwich & Worcester, .	Allyn's Point,	Worcester,	66.16	
Rhode Island & Mass., .	Franklin,	Valley Falls,	13.59	
Rockville, .	Vernon,	Rockville,	4.43	
Providence & Springfield,	Providence,	Douglas Junc.,	28.18	
Woonsocket & Pascoag, .	Woonsocket,	Harrieville,	9.50	
Meriden, W. & Conn. R.,	Waterbury,	Cromwell,	30.34	152.20
4. Milford and Woonsocket,	Bellingham,	Ashland,	15.32	
Milford, Frank'n & Prov.	Franklin,	Bellingham,	4.65	19.97
5. Newb'g. Dutch. & Conn.,	Hopewell Junc.,	Wicopee,	10.95	
N. Y., Prov. & Boston, .	Junc. N. Y. & N. E.,	Depot, Prov.	.10	
Boston & Albany, .	Junc. N. Y. & N. E.,	Depot. Springfld.,	1.41	12.46
Total Mileage Operated,				545.19

Property Operated.—Continued.

Name of all Coal, Bridge, Canal, or other Properties, the Earnings and Expenses of which affect the General Balance Sheet (p. 247):

Name.	Character of Business.	Title. (Owned, Leased, etc.)	State or Territory.
Boston Harbor Transfer,	Transfer,	Owned jointly with Boston & Maine Railroad Company.	Massachusetts.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Capital Stock:				
Common,	198,310	\$100.00	\$20,000,000	\$19,831,000
“Berdell” Bonds				
Convertible,	.....	.....	.....	169,000
Preferred,	50,000	100.00	5,000,000	3,817,600
Total,	248,310	\$100.00	\$25,000,000	\$23,817,600

Manner of Payment for Capital Stock.	Number of Shares Issued during Year.	Total Number of Shares Issued.	Total Cash Realized.
Issued for Cash: Preferred, . . . .	.....	38,176	\$3,995,436.00
Issued for Reorganization:			
Common,	200	198,310	.....
Total,	200	236,486	\$3,995,436.00

NOTE.— Under the terms of the Boston, Hartford & Erie “Berdell” Mortgage under which this Company obtained possession, the “Berdell” bonds were to be exchanged for stock of the new Company, ten shares of stock for each \$1,000 bond, of which 19,831 bonds have been converted and 169 bonds are still outstanding, exchangeable for the 1,690 shares of Common Stock unissued, held for the purpose of retiring these remaining bonds.

Funded Debt.

1. MORTGAGE BONDS.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
1st Mortgage,	1876	1905	\$6,000,000	\$6,000,000	\$6,000,000	\$5,367,117.24
1st Mortgage,	1876	1905	4,000,000	4,000,000	4,000,000	4,141,979.86
2d Mortgage,	1882	1902	5,000,000	5,000,000	5,000,000	4,877,993.93
Boston Terminal, 1st Mortgage, }	1889	1939	1,500,000	1,500,000	1,500,000	1,407,900.00
Totals, . . .	....	....	\$16,500,000	\$16,500,000	\$16,500,000	\$15,794,991.03

2. MISCELLANEOUS OBLIGATIONS.

a Mortgage Notes:							
Curtis Wharf,	1887	1888	60,000.00	60,000.00	Property acquired.	
Curtis Wharf,	1888	1893	80,000.00	80,000.00	.....	
Curtis Wharf,	1893	1896	52,000.00	52,000.00	52,000.00		
Lands at Springfield,	1888	1893	17,500.00	17,500.00	17,500.00		
*Hartford,	1875	1875	13,800.00	13,800.00	13,800.00		
*Hartford,	1876	1887	3,000.00	3,000.00	3,000.00		
Hartford,	1893	Dema'd	5,000.00	5,000.00	5,000.00		
b Contract Liab.:							
Piper Wharf,	1877	1897	200,000.00	200,000.00	200,000.00		
1,000 Freight Cars,	1890	1897	460,910.00	460,910.00	385,910.00		
10 Locomotives,	1893	1 to 24m	122,776.56	122,776.56	81,851.04		
Total,	1,014,986.56	1,014,986.56	759,061.04	
Grand Total, . . \$	17,514,986.56	17,514,986.56	17,259,061.04	15,794,991.03	

INTEREST ON MORTGAGE BONDS.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
7 per cent.	January and July, . . .	\$420,000.00	\$200,000.00
6 per cent.	January and July, . . .	240,000.00	
6 per cent.	February and August, . . .	300,000.00	152,760.00
4 per cent.	April and October, . . .	58,860.00	27,720.00
.....	.....	\$1,018,860.00	\$380,480.00

INTEREST ON MISCELLANEOUS OBLIGATIONS.

4½ per cent.	.....	845.00	1,350.00
5 per cent.	.....	1,666.66	6,000.00
6 per cent.	March, June, Sept., and Dec., .	1,633.00	780.00
6 per cent.	January and July, . . .	1,079.16	962.50
6 per cent.	January and July, . . .	897.00	828.00
5 per cent.	January and July, . . .	162.50	150.00
5 per cent.	February and August, . . .	252.63	250.00
6 per cent.	Monthly, . . .	12,000.00	12,000.00
6 per cent.	Monthly, . . .	38,550.00	23,850.00
.....	.....	57,090.95	46,170.50
.....	.....	\$1,075,950.95	\$426,650.50

* Assumed by this Company, Jan. 19, 1892.

Recapitulation of Funded Debt.

New York & New England Railroad Company.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during year.
Mtge. Bds. (p. 236),	\$16,500,000.00	\$16,500,000.00	\$1,018,860.00	\$380,480.00
Miscellaneous Obligations (p. 236),	1,014,986.56	759,061.04	57,090.95	46,170.50
Total, . . .	\$17,514,986.56	\$17,259,061.04	\$1,075,950.95	\$426,650.50

Current Assets and Liabilities.

New York & New England Railroad Company.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Due from Agents, . . . \$99,034.14	Loans and Bills Payable, \$675,000.00
Net Traffic Balances due from other Companies, 81,304.33	Equipment Notes, . . . 12,823.90
Due from Solvent Companies and Individuals, . 1,128,960.48	Audited Vouchers and Accounts, . . . 446,508.88
Current Liabilities, . . . 1,338,697.40	Wages and Salaries, . . . 940.26
	Net Traffic Balances due to other Companies, . . 640,568.56
	Matured Interest Coupons unpaid (Including Coupons due July 1), . . . 843,304.00
	Rents due July 1, . . . 23,813.24
	Miscellaneous, . . . 37.51
Total, . . . \$2,642,996.35	Total, . . . \$2,642,996.35

Material and Supplies on hand, \$213.37.

Current Assets and Liabilities.

Thomas C. Platt, Marsden J. Perry, Receivers of the New York & New England Railroad Company.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$147,304.71	Audited Vouchers and Accounts, . . . \$335,474.36
Due from Agents, . . . 366,047.71	Wages and Salaries, . . . 81,328.36
Net Traffic Balances due from other Companies, 171,238.94	Net Traffic Balances due to other Companies, . . 199,737.66
Due from Solvent Companies and Individuals, . 116,819.23	Rents due July 1, . . . 25,044.87
	Cash Assets, . . . 159,825.34
Total, . . . \$801,410.59	Total, . . . \$801,410.59

Materials and Supplies on hand, \$349,428.21.

Recapitulation of Funded Debt.

Combined Accounts of the New York & New England Railroad Company
and of the Receivers.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during year.
Mtge. Bds. (p. 236),	\$16,500,000.00	\$16,500,000.00	\$1,018,860.00	\$380,480.00
Miscellaneous Obligations (p. 236),	1,014,986.56	759,061.04	57,090.95	46,170.50
Total, . . .	\$17,514,986.56	\$17,259,061.04	\$1,075,950.95	\$426,650.50

Current Assets and Liabilities.

Combined Accounts of the New York & New England Railroad Company
and of the Receivers.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$147,304.71	Loans and Bills Payable, \$675,000.00
Due from Agents, . . . 465,081.85	Equipment Notes, . . . 12,823.90
Net Traffic Balances due from other Companies, 252,543.27	Audited Vouchers and Accounts, 781,983.24
Due from Solvent Companies and Individuals, . 1,240,779.71	Wages and Salaries, . . . 82,268.62
Current Liabilities, . . . 1,178,872.06	Net Traffic Balances due to other Companies, . . . 840,306.22
	Matured Interest Coupons unpaid (Including Coupons due July 1), . . . 843,304.00
	Rents due July 1, . . . 48,858.11
	Miscellaneous, 37.51
Total, \$3,284,581.60	Total, \$3,284,581.60

Materials and Supplies on hand, \$349,641.58.

Recapitulation.

a. For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 235), .	\$23,817,600.00	\$23,817,600.00	360.56	\$66,057
Bonds (p. 236), . . .	17,259,061.04	17,259,061.04	360.56	47,867
Current Liabilities, .	3,284,581.60	3,284,581.60	360.56	9,110
Total,	\$44,361,242.64	\$44,361,242.64	360.56	\$123,034

b. For mileage operated by road making this report (trackage rights excluded), the operations of which are included in the Income Account (page 241):

Name of Road.	Capital Stock.	Funded Debt.	Current Liabilities.	Total.	AMT. PER MILE OF LINE.	
					Miles.	Amount.
N. Y. & New England,	\$23,817,600.00	\$17,259,061.04	\$3,284,581.60	\$44,361,242.64	360.56	\$123,034
Norwich & Worcester,	2,775,800.00	400,000.00	567,460.33	3,743,260.33	66.16	56,579
R. I. & Mass., in Mass.,	100,000.00	.....	.....	100,000.00	6.52	15,337
R. I. & Mass., in R. I.,	180,000.00	.....	5,300.00	185,300.00	7.07	26,209
Rockville,	108,750.00	.....	16,900.00	125,650.00	4.43	28,363
Milford & Woonsocket,	148,600.00	60,000.00	.....	208,600.00	15.32	13,616
Milford, Frank. & Prov.,	100,000.00	10,000.00	.....	110,000.00	4.65	23,656
Providence & Springf'd,	517,450.00	750,000.00	.....	1,267,450.00	23.18	44,977
Woonsocket & Pascoag,	200,000.00	100,000.00	.....	300,000.00	9.50	31,579
M., W. & Conn. River,	484,000.00	450,000.00	22,500.00	956,500.00	30.34	31,526
Total,	\$28,432,200.00	\$19,029,061.04	\$3,896,741.93	\$51,358,002.97	532.73	\$96,405

Cost of Road, Equipment, and Permanent Improvements.

Item.	Expenditures during year not included in Operating Expenses, charged to Construction or Equipment.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost Per Mile.
Construction:				
Other Real Estate, . . .	Cr. \$1,235.00	.....	.....	.....
Fences,	Cr. 276.89	.....	.....	.....
Bridges and Trestles, . .	Cr. 3,171.66	.....	.....	.....
Other Superstructure, . .	4,871.81	.....	.....	.....
Buildings, Furniture, and Fixtures,	90.72	.....	.....	.....
Shop Machinery and Tools, .	Cr. 104.61	.....	.....	.....
Engineering Expenses, . .	1,002.57	.....	.....	.....
Sidings and Yard Extensions,	8,099.69	.....	.....	.....
Terminal Facilities and Elevators,	3,730.17	.....	.....	.....
Other items,	Cr. 68.16	.....	.....	.....
Total Construction, . . .	\$12,938.64	\$35,002,209.15	\$35,015,147.79	\$97,113.23
Equipment:				
Locomotives,	Cr. 266.65	.....	.....	.....
Other Cars of all classes, .	Cr. 28.56	.....	.....	.....
Total Equipment,	Cr. \$295.21	\$5,335,063.04	\$5,334,767.83	\$14,795.78
Total Cost Construction, } Equipment, etc., }	\$12,643.43	\$40,337,272.19	\$40,349,915.62	\$111,909.01

NOTE.—This amount represents the cost of the road to the Company but not the total cost of constructing it. It is based on the amount of the "Berdell Bonds" and mortgage (\$20,000,000), which bonds, after foreclosure, became convertible into the stock of the Company, and upon the sums laid out by the Company since that foreclosure in taking up underlying liens and completing and extending the road. The actual cost of constructing the road to the former owners, and, since acquiring its title, to the Company, is largely in excess of the cost of the road to the Company as above returned, as has been ascertained, pursuant to the laws of the State of Connecticut, by the President, Treasurer, and an Engineer, approved by the Railroad Commissioners of the State of Connecticut, in February, 1892, as an engineer to ascertain the cost of the construction of the road, the amount thus ascertained being between \$45,000,000 and \$50,000,000, exclusive of equipment, and considerably over \$50,000,000 including equipment.

Income Account.**New York & New England Railroad Company.**

Gross Earnings from Operation,	\$2,825,898.13	
Less Operating Expenses,	2,145,487.99	
Income from Operation,		\$680,410.14
Boston Harbor Transfer,	\$601.90	
Income from other sources,		601.90
Total Income,		\$681,012.04
Deductions from Income:		
Interest on Funded Debt accrued,	\$1,075,950.95	
Interest on Interest-bearing Current Liabilities		
Accrued, not otherwise provided for,	20,866.28	
Rents paid for lease of road — Page 47, A,	251,604.01	
Taxes,	260,839.16	
Total Deduction from Income,		1,609,260.40
Deficit,		\$928,248.36
Deficit from Operations of Year ending June 30, 1894,		\$928,248.36
Deficit on June 30, 1893 [from "General Balance Sheet," 1893 Report],		844,287.51
		\$1,772,535.87
Additions for Year,		321,575.93
Deficit on June 30, 1894 [for entry on "General Balance Sheet," Page 49],		\$2,094,111.80

NOTE.

Add Renewal of locomotives worn out in former years,	\$113,750.59
General Improvements charged off,	29,943.93
Remainder of amount paid to New England Equipment Company in settlement of claims under contract for 1,000 freight cars,	56,339.52
Amount paid Rumsey Heirs for old claims for rental and damage at Fishkill, N. Y.,	25,000.00
Discount on Boston Terminal First Mortgage Bonds issued in settlement of Curtis Wharf Notes,	22,800.00
Worthless accounts and balances written off,	73,741.89
	\$321,575.93

Income Account.**Thomas C. Platt, Marsden J. Perry, Receivers of the New York & New England Railroad Company.**

Gross Earnings from Operation,	\$2,567,997.43	
Less Operating Expenses,	1,969,523.39	
Income from Operation,		\$598,474.04
Boston Harbor Transfer,	2,278.89	
Income from other sources,		2,278.89
Total Income,		\$600,752.93
Deductions from Income:		
Interest on Interest bearing Current Liabilities		
Accrued, not otherwise provided for,	\$40.67	
Rents (p. 245),	242,450.36	
Taxes,	1,637.74	
Total Deduction from Income,		244,128.77
Net Income,		\$356,624.16

Income Account.—Continued.

Surplus from Operations of Year ending June 30, 1894,	\$356,624.16
Deficit on June 30, 1892, [from "General Balance Sheet," 1892 Report],	\$356,624.16
Deductions for Year,	58.41
Surplus on June 30, 1894 [for entry on "General Balance Sheet," p. 247],	\$356,565.75

NOTE.

Deduct General Improvements charged off,	\$58.41
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Income Account.

Combined Accounts of the New York & New England Railroad Company and of the Receivers.

Gross Earnings from Operation (p. 243),	\$5,393,895.56
Less Operating Expenses (p. 244),	4,115,011.38
Income from Operation,	\$1,278,884.18
Miscellaneous Income—less Expenses (p. 41),	\$2,880.79
Income from other sources,	2,880.79
Total Income,	\$1,281,764.97
Deductions from Income :	
Interest on Funded Debt accrued (p. 238),	\$1,075,950.95
Interest on Interest-bearing Current Liabilities accrued, not otherwise provided for,	20,906.95
Rents paid for lease of road (p. 47),	494,054.37
Taxes,	262,476.90
Total Deductions from Income,	1,853,389.17
Deficit,	\$571,624.20
Deficit from Operations of Year ending June 30, 1894,	\$571,624.20
Deficit on June 30, 1893, [from "General Balance Sheet," 1893 Report],	844,287.51
	\$1,415,911.71
Additions for Year,	321,634.34
Deficit on June 30, 1894 [for entry on "General Balance Sheet," p. 247],	\$1,737,546.05

NOTE.

Add Renewal of locomotives worn out in former years,	\$113,750.59
General Improvements charged off,	30,002.34
Remainder of amount paid to New England Equipment Company in settlement of claims under contract for 1,000 freight cars,	56,339.52
Amount paid Rumsey Heirs for old claims for rental and damage at Fishkill, N. Y.,	25,000.00
Discount on Boston Terminal First Mortgage Bonds issued in settlement of Curtis Wharf Notes,	22,800.00
Worthless accounts and balances written off,	73,741.89
	\$321,634.34

Earnings from Operation.

Combined accounts of the New York & New England Railroad Company and of the Receivers.

Item.	Total Receipts.	Deductions, Acct. of Repay- ments, etc.	Actual Earnings.
Passenger: Passenger Revenue, . . .	\$1,894,945.09		
Less Repayments:			
Tickets redeemed, . . .		\$9,036.32	
Excess Fares refunded, . . .		14,722.10	
Total Deductions, . . .		\$23,758.42	
Total Passenger Revenue, . . .			\$1,871,186.67
Mail,			59,008.80
Express,			122,976.31
Extra Baggage and Storage, . . .			12,945.68
Other items,			28,965.55
Total Passenger Earnings, . . .			\$2,095,083.01
Freight: Freight Revenue, . . .	3,158,735.76		
Less Repayments:			
Overcharge to Shippers, . . .		\$33,181.49	
Total Deductions, . . .		\$33,181.49	
Total Freight Revenue, . . .			\$3,125,554.27
Elevators,			12,723.26
Other items,			77,270.48
Total Freight Earnings, . . .			3,215,548.01
Total Passenger and Freight Earnings, . . .			\$5,310,631.02
Switching Charges — Balance, . . .	24,959.80		
Rents not otherwise provided for, . . .	54,788.79		
Other sources,	3,515.95		
Total Other Earnings, . . .			\$83,264.54
Total Gross Earnings from Operation } — Entire Line, }			\$5,393,895.56

Miscellaneous Income.

Item.	Net Miscellaneous Income.
Boston Harbor Transfer,	\$2,880.79

Operating Expenses.

Combined Accounts of the New York & New England Railroad Company
and of the Receivers.

Item.	Amount.
Maintenance of Way and Structures :	
Repairs of Roadway,	\$319,388.24
Renewals of Rails,	38,228.61
Renewals of Ties,	111,830.84
Repairs of Bridges and Culverts,	72,221.65
Repairs of Fences, Road-crossings, Signs, and Cattle Guards,	14,812.07
Repairs of Buildings,	45,724.45
Repairs of Docks and Wharves,	8,550.02
Repairs of Telegraph,	104.35
Total,	\$610,860.23
Maintenance of Equipment :	
Repairs and renewals of Locomotives,	190,309.61
Repairs and renewals of Passenger Cars,	67,317.22
Repairs and renewals of Freight Cars,	185,951.56
Repairs and renewals of Ferryboats, Tugs, Floats, and Barges,	5,201.14
Shop Machinery, Tools, etc.,	13,013.65
Other expenses,	20,316.09
Total,	\$482,109.27
Conducting Transportation :	
Wages of Enginemen, Firemen, and Roundhousemen,	388,778.04
Fuel for Locomotives,	611,604.63
Water-supply for Locomotives,	38,956.25
All other supplies for Locomotives,	15,623.67
Wages of other Trainmen,	364,616.22
All other train supplies,	62,354.19
Wages of Switchmen, Flagmen, and Watchmen,	210,310.03
Expenses of Telegraph, including Train Dispatchers and Operators,	80,893.63
Wages of Station Agents, Clerks, and Laborers,	508,756.79
Station supplies,	59,147.92
Car Mileage—Balance,	128,330.76
Loss and Damage,	20,076.11
Injuries to persons,	29,119.70
Barges, Floats, Tugs, Ferryboats, expenses of, including Wages, Fuel, and supplies,	43,198.78
Total,	\$2,561,766.77

Operating Expenses.—Continued.

Item.	Amount.
General Expenses :	
Salaries of Officers,	\$113,547.55
Salaries of Clerks,	101,604.94
General Office expenses and supplies,	11,987.53
Agencies, including salaries and rents,	22,985.60
Advertising,	16,269.50
Insurance,	29,857.65
Expense of Fast Freight Lines,	17,486.41
Expense of Traffic Associations,	2,038.69
Expense of Stock Yards and Elevators,	3,874.04
Rents not otherwise provided for,	51,039.75
Legal Expenses,	55,788.96
Stationery and Printing,	33,794.49
Total,	\$460,275.11
Recapitulation of Expenses :	
Maintenance of Way and Structures,	610,860.23
Maintenance of Equipment,	482,109.27
Conducting Transportation,	2,561,766.77
General Expenses,	460,275.11
Grand Total,	\$4,115,011.38
Percentage of Expenses to Earnings,—Entire Line,	76.29

Rentals Paid.

New York & New England Railroad Company.

Rents paid for lease of road:

Name of Road.	Cash.	Total.
Norwich & Worcester,	\$135,625.39	\$135,625.39
Providence & Springfield,	34,377.63	34,377.63
Woonsocket & Pascoag,	7,500.00	7,500.00
Rhode Island & Massachusetts,	10,000.00	10,000.00
Boston & Albany,	2,500.00	2,500.00
Rockville,	2,281.87	2,281.87
Milford & Woonsocket,	3,343.71	3,343.71
Milford, Franklin & Providence,	2,229.13	2,229.13
Newburgh, Dutchess & Connecticut,	24,358.93	24,358.93
New London Northern,	19,387.35	19,387.35
Meriden, Waterbury & Conn. River,	10,000.00	10,000.00
Total Rents,	\$251,604.01	\$251,604.01

Rentals Paid.—*Continued.*

Thomas C. Platt, Marsden J. Perry, Receivers of the New York & New England Railroad Company.

Rents paid for lease of road:

Name of Road.	Cash.	Total.
Norwich & Worcester,	\$128,495.85	\$128,495.85
Providence & Springfield,	34,373.50	34,373.50
Woonsocket and Pascoag,	7,500.00	7,500.00
Rhode Island & Massachusetts,	10,000.00	10,000.00
Boston & Albany,	2,500.00	2,500.00
Rockville,	2,281.88	2,281.88
Milford & Woonsocket,	2,789.21	2,789.21
Milford, Franklin & Providence,	1,859.47	1,859.47
Newburgh, Dutchess & Connecticut,	22,112.82	22,112.82
New London Northern,	20,537.63	20,537.63
Meriden, Waterbury & Conn. River,	10,000.00	10,000.00
Total Rents,	\$242,450.36	\$242,450.35

Combined Accounts of the New York & New England Railroad Company and of the Receivers.

Rents paid for lease of road:

Name of Road.	Cash.	Total.
Norwich & Worcester,	\$264,121.24	\$264,121.24
Providence & Springfield,	68,751.13	68,751.13
Woonsocket & Pascoag,	15,000.00	15,000.00
Rhode Island & Massachusetts,	20,000.00	20,000.00
Boston & Albany,	5,000.00	5,000.00
Rockville,	4,563.75	4,563.75
Milford & Woonsocket,	6,132.92	6,132.92
Milford, Franklin & Providence,	4,088.60	4,088.60
Newburgh, Dutchess & Connecticut,	46,471.75	46,471.75
New London Northern,	39,924.98	39,924.98
Meriden, Waterbury & Conn. River,	20,000.00	20,000.00
Total Rents,	\$494,054.37	\$494,054.37

Comparative General Balance Sheet.

New York & New England Railroad Company.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$35,002,209.15	Cost of Road (p. 240),	\$35,015,147.79	\$12,938.64	.....
5,335,063.04	Cost of Equipment (p. 240),	5,334,767.83	.....	\$295.21
	Lands owned, ..	.....	12,643.43	.....
1,686,763.81	Cash & Cur. Assets (p. 237),	1,304,298.95	.....	382,464.86
	Other Assets :			
297,513.48	Materials and Supplies, .	213.37	.....	297,300.11
	Thomas C. Platt, Marsden			
	J. Perry, Receivers, .	138,981.45	138,981.45	.....
150,982.03	Debit Balances and expen-			
	ditures undistributed, .	90,432.11	.....	60,549.92
128,275.00	Dividend No. 13 on Pre-			
	ferred Stock payable May			
	1, 1892, payment en-			
	joined,	128,275.00	.....	.....
844,287.51	Profit and Loss, . . .	2,094,111.80	1,249,824.29	.....
\$43,445,094.02	Grand Total, . . .	\$44,106,228.30	\$661,134.28	

Thomas C. Platt, Marsden J. Perry, Receivers of the New York & New England Railroad Company.

Assets.	Total, June 30, 1894.
Cash and Current Assets (p. 237),	\$801,410.59
Other Assets :	
Materials and Supplies,	349,428.21
Expenditures undistributed,	5,908.94
Grand Total,	\$1,156,747.74

Comparative General Balance Sheet.— *Continued.*

Combined Accounts of the New York & New England Railroad Company
and of the Receivers.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$35,002,209.15	Cost of Road (p. 240),	\$35,015,147.79	\$12,938.64	.....
5,335,063.04	Cost of Equipment (p. 240).	5,334,767.83	.....	\$295.21
	Lands owned, .	.....	12,643.43	.....
1,686,763.81	Cash & Cur. Assets (p. 237),	2,105,709.54	418,945.73	.....
	Other Assets :			
297,513.48	Materials and Supplies, .	349,641.58	52,128.10	.....
150,982.03	Debit Balances, being taxes and expenditures undis- tributed, .	96,341.05	.....	54,640.98
128,275.00	Dividend No. 13 on Pre- ferred Stock, payable May 1, 1892, payment en- joined, .	128,275.00	.....	.....
844,287.51	Profit and Loss, . .	1,737,546.05	893,258.54	.....
\$43,445,094.02	Grand Total, . .	\$44,767,428.84	1,322,334.82	

New York & New England Railroad Company.

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$23,817,600.00	Capital Stock (p. 235), .	\$23,817,600.00	.....	.....
17,187,522.50	Funded Debt (p. 236), .	17,259,061.04	\$71,538.54	.....
61,422.99	Supplies transferred from N. & W. R. R., .	61,422.99	.....	.....
2,065,719.44	Current Liabilities (p. 237),	2,642,996.35	577,276.91	.....
141,122.02	Accrued Interest on Fund- ed Debt not yet payable,	140,135.65	.....	\$986.37
20,533.69	Accrued Rentals not yet payable, .	.....	.....	20,533.69
151,173.38	Credit Balances, . .	185,012.27	33,838.89	.....
\$43,445,094.02	Grand Total, . .	\$44,106,228.30	\$661,134.28	.....

NOTE.—Payment of Dividend No. 13 on preferred stock enjoined, action pending. Liability considered as contingent, not current, and included under credit balances.

Comparative General Balance Sheet.—Continued.

Thomas C. Platt, Marsden J. Perry, Receivers of the New York & New England Railroad Company.

Liabilities.	Total, June 30, 1894.
Current Liabilities (p. 237),	\$641,585.25
Accrued Rentals not yet payable,	17,284.00
New York & New England Railroad Company,	138,981.45
Credit balances,	2,331.29
Profit and Loss,	356,565.75
Grand Total,	\$1,156,747.74

Combined Accounts of the New York & New England Railroad Company and of the Receivers.

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$23,817,600.00	Capital Stock (p. 235),	\$23,817,600.00		
17,187,522.50	Funded Debt (p. 236),	17,259,061.04	\$71,538.54	
61,422.99	Supplies transferred from N. & W. R. R.,	61,422.99		
2,065,719.44	Current Liabilities (p. 238),	3,284,581.60	1,218,862.16	
141,122.02	Accrued Interest on Fund- ed Debt not yet payable,	140,135.65		\$986.37
20,533.69	Accrued Rentals not yet payable,	17,284.00		3,249.69
151,173.88	Credit Balances,	187,343.56	36,170.18	
\$43,445,094.02	Grand Total,	\$44,767,428.84	1,322,334.82	

NOTE.—Payment of Dividend No. 13 on preferred stock enjoined, action pending. Liability considered as contingent, not current, and included under credit balances.

Important Changes during the Year.

200 shares of Common Stock have been given in exchange for 20 Berdell Bonds.

114 shares of Boston Terminal First Mortgage Bonds were issued to apply upon the retirement of Mortgage Notes on Curtis Wharf, Boston, Mass.

The property, franchise, and books of the Company were placed in the hands of Receivers by order of the United States Circuit Courts. The date of the first order is December 26, 1893.

Contracts, Agreements, etc.

The United States Express Company operate over all the mileage owned and leased by the railroad company, on the basis of an agreed rental.

There are no mail contracts, but the Company carry mails under the governmental laws and regulations.

The Pullman Palace Car Company sleeping cars on a mileage basis. Parlor cars are run, some of which are owned by this Company and some by the New York, New Haven & Hartford Railroad Company, the receipts and expenses being divided on a mileage basis.

This company has arrangements with its connections for the joint interchange of traffic, with Fast Freight Lines and Railroads for through billing, and railroads generally, as to through tickets and rates.

The Western Union Telegraph Company operates all telegraph wires and transmits the messages of this Company free.

This Company has contracts with the Southern New England Telephone Company and the New England Telephone and Telegraph Company for general office and station service at various points on its lines.

Security for Funded Debt (page 236).

Class of Bond or Obligation.	What Road Mortgaged.	Miles.	Amount of Mortgage per Mile of Line.	What Equipment Mortgaged.
1. Mortgage Bonds:				
1st Mortgage, . . .	Entire Line owned.	36,056	\$27,735.00	
2d Mortgage, . . .	Entire Line owned.	36,056	13,867.00	
Boston Terminal, 1st Mortgage, . . .	Boston Terminal.			
2. Miscel. Obligations:				
A. Mortgage Notes:				
Curtis Wharf, . . .	Boston Terminal.			
Lands at Springfield & Hartford,	Freight St'n Gr'ds.			
B. Contract L'ilities:				
Piper Wharf, . . .	Boston Terminal.			
1,000 Fr'ght Cars, }				Equipment purchased.
10 Locomotives, }				

Employees and Salaries.

Combined Accounts of the New York & New England Railroad Company and of the Receivers.

Class.	Num-ber.	Total No. of Days Worked.	Total Yearly Compensation.	Av. Daily Compensation.
General Officers,	30	9,390	\$66,966.66	\$7.13
Other Officers:				
General Office Clerks,	114	34,884	75,231.04	2.16
Other Employees:				
Station Agents,	195	67,301	103,427.04	1.54
Other Station Men,	468	148,262	203,853.75	1.37
Enginemen,	214	59,176	223,855.26	3.78
Firemen,	207	60,800	127,681.36	2.10
Conductors,	197	67,324	198,827.56	2.95
Other Trainmen,	482	157,189	309,712.04	1.97
Machinists,	126	35,595	79,753.00	2.24
Carpenters,	211	63,036	121,526.82	1.93
Other Shopmen,	370	115,128	224,235.61	1.94
Section Foremen,	106	36,322	60,185.20	1.66
Other Trackmen,	448	157,404	225,445.92	1.43
Switchmen, Flagmen, and Watchmen,	218	77,032	92,557.64	1.20
Telegraph Operators and Dispatchers,	106	37,834	64,158.25	1.70
Employees—account Floating Equipm't,	17	6,872	14,702.32	2.14
All other Employees and Laborers, .	548	175,643	292,903.93	1.67
Total (including "General Officers"),	4,057	1,309,192	\$2,485,023.40	\$1.90
Less "General Officers,"	30	9,390	66,966.66	7.13
Total (excluding "General Officers"),	4,027	1,299,802	2,418,056.74	\$1.86
Distribution of above:				
General Administration,	144	44,274	142,197.70	3.21
Maintenance of Way and Structures, .	772	270,758	378,188.76	1.40
Maintenance of Equipment,	707	213,759	425,515.43	1.99
Conducting Transportation,	2,434	780,401	1,539,121.51	1.97
Total (including "General Officers"),	4,057	1,309,192	\$2,485,023.40	\$1.90
Less "General Officers,"	30	9,390	66,966.66	7.13
Total (excluding "General Officers"),	4,027	1,299,802	\$2,418,056.74	\$1.86
Total (including "General Officers"),	4,057	1,309,192	\$2,485,023.40	\$1.90
Entire Line,	4,057	1,309,192	\$2,485,023.40	\$1.90

Passenger, Freight, and Train Mileage.

Combined accounts of the New York & New England Railroad Company and of the Receivers.

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	8,146,122			
Number of passengers carried one mile,	95,523,409			
No. of pass. carried one mile per mile of road,	175,211			
Average distance carried,	11.726			
Total passenger revenue,		1,871,186	67	
Av. amount received from each passenger,			22	970
Average receipts per passenger per mile,			01	959
Total passenger earnings,		2,095,083	01	
Passenger earnings per mile of road,		3,842	85	
Passenger earnings per train mile,			97	586
Freight Traffic:				
No. of tons carried of frt. earning revenue,	2,991,342			
Number of tons carried one mile,	290,492,309			
No. of tons carried one mile per mile of road,	532,828			
Average distance haul of one ton,	97.11			
Total freight revenue,		3,125,554	27	
Av. amount received for each ton of freight,			1	04
Average receipts per ton per mile,			01	076
Total freight earnings,		3,215,548	01	
Freight earnings per mile of road,		5,898	03	
Freight earnings per train mile,			1	39
Passenger and Freight:				
Passenger and freight revenue,		4,996,740	94	
Pass. and freight revenue per mile of road,		9,165	13	
Passenger and freight earnings,		5,310,631	02	
Pass. and freight earnings per mile of road,		9,740	88	
Gross earnings from operation,		5,393,895	56	
Gross earnings from operation per m. of road,		9,893	61	
Gross earnings from operation per train mile,			1	21
Operating expenses,		4,115,011	38	
Operating expenses per mile of road,		7,547	85	
Operating expenses per train mile,			92	571
Income from operation,		1,278,884	18	
Income from operation per mile of road,		2,345	76	
Train Mileage:				
Miles run by passenger trains,	2,131,537			
Miles run by freight trains,	2,252,201			
Miles run by mixed trains,	61,488			
Total Mileage Trains Earning Revenue,	4,445,226			
Miles run by switching trains,	1,060,919			
Miles run by construction and other trains,	240,287			
Grand Total Train Mileage,	5,746,432			
Mileage of loaded freight cars—North or East,	17,506,062			
Mileage of loaded freight cars—South or West,	11,670,691			
Mileage of empty freight cars—North or East,	3,790,026			
Mileage of empty freight cars—South or West,	8,843,408			
Average number of freight cars in train,	18.19			
Average number of loaded cars in train,	12.69			
Average number of empty cars in train,	5.50			
Average number of tons of freight in train,	126.39			
Av. No. of tons of freight in each loaded car,	9.96			

Freight Traffic Movement.

Combined Account of the New York & New England Railroad Company
and of the Receivers.

Commodity.	Freight Originating on this Road.	Freight Received from Con- necting Roads and other Carriers.	TOTAL FREIGHT TONNAGE.	
	Whole Tons.	Whole Tons.	Whole Tons.	Per Ct.
Products of Agriculture:				
Grain,	19,321	198,395	217,716	7.28
Flour,	1,938	83,473	85,411	2.85
Other Mill Products,	21,829	53,298	75,127	2.51
Hay,	15,386	44,887	60,273	2.02
Tobacco,	876	354	1,230	.04
Cotton,	6,826	48,566	55,392	1.85
Fruit and Vegetables,	11,654	13,774	25,428	.85
Products of Animals:				
Live Stock,	4,767	2,548	7,315	.25
Dressed Meats,	1,117	13,459	14,576	.49
Other Packing-House Products,	403	1,616	2,019	.07
Poultry, Game, and Fish,	2,436	1,452	3,888	.13
Wool,	14,039	12,227	26,266	.88
Hides and Leather,	6,279	43,295	49,574	1.66
Products of Mines:				
Anthracite Coal,	166,794	446,112	612,906	20.46
Bituminous Coal,	216,105	33,616	249,721	8.35
Coke,	121	6,604	6,725	.23
Ores,	705	96	801	.03
Stone, Sand, and other like articles,	72,645	25,800	98,445	3.29
Salt,	1,083	15,340	16,423	.55
Products of Forest:				
Lumber,	60,300	116,892	177,192	5.93
Other Forest Products,	30,606	17,838	48,444	1.62
Manufactures:				
Petroleum and other oils,	5,506	20,025	25,531	.85
Sugar,	11,873	1,374	13,247	.44
Naval Stores,	201	190	391	.01
Iron, Pig and Bloom,	7,145	12,987	20,132	.67
Iron and Steel Rails,	984	12,446	13,430	.45
Other Castings and Machinery,	31,721	50,719	82,440	2.76
Bar and Sheet Metal,	6,218	25,043	31,261	1.04
Cement, Brick, and Lime,	72,130	25,086	97,216	3.26
Agricultural Implements,	656	319	975	.03
Wagons, Carriages, Tools, etc.,	2,022	1,240	3,262	.11
Wines, Liquors, and Beers,	9,235	14,315	23,550	.79
Household Goods and Furniture,	4,520	3,105	7,625	.26
Cotton and Woolen Fabrics,	21,581	21,058	42,639	1.42
Merchandise:	529,227	260,921	790,148	26.41
Miscellaneous:				
Other commodities not mentioned above,	4,379	244	4,623	.16
Total Tonnage—Entire Line,	1,362,628	1,628,714	2,991,342	100.00

Description of Equipment.

Item.	No. added during Year.	Total No. at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
			No.	Name.	No.	Name.
Locomotives—Owned and Leased:						
Passenger,	84	84	84	Westinghouse	29	Wilkins.
Freight,	10	99	68	"	.....
Switching,	29	29	2	Air brakes.	.....
Total Locomotives in Service, Less Locomotives Leased,	10	212 30	154 30	..... Westinghouse & New York.	29	
Total Locomotives Owned,		182	124	.....	29	
Cars—Owned and Leased:						
In Passenger Service—						
First-class Cars,	186	186	186	Westinghouse.	{ 6 Jan. & Mil. 180 Miller.	
Combination Cars,	55	55	55	"	55 "	
Dining Cars,	3	3	3	"	3 "	
Parlor Cars,	5	5	5	"	5 "	
Baggage, Express, and Pos- tal Cars,	30	30	30	"	{ 2 Jan. & Mil. 28 Miller.	
Total,		279	279	.....	279	
In Freight Service—						
Box Cars,	2525	164	164	Westinghouse.	{ 100 Gould. 112 Dowling.	
Flat Cars,	510	.....	.....	.....	64 Miller. 513 Safford.	
Coal Cars,	2369	.....	.....	.....	400 "	
Other Cars,	842	.....	.....	.....	.....
Total,		6246	164	.....	1189	
In Company's Service—						
Officers' and Pay Cars,	2	2	2	Westinghouse.	2 Miller.	
Gravel Cars,	10	.....	.....	.....	4 "	
Derrick Cars,	15	.....	.....	.....	.....
Caboose Cars,	87	.....	.....	.....	.....
Total Cars in Service,		6639	445	.....	1474	
Less Cars Leased,		1055	.....	.....	.....
Total Cars Owned,		5584	445	.....	1474	

Mileage.

a. MILEAGE OF ROAD OPERATED.

Line in Use.	LINE REPRESENTED BY CAPITAL STOCK.		Line Operated under Lease.	Line Operated under Contract, etc.	Line Operated under Trackage Rights.	Total Mileage Operated.	RAILS.	
	Main Line.	Branches and spurs.					Iron.	Steel.
Miles of single track,	216.69	143.87	152.20	19.97	12.46	545.19	1.55	531.18
Miles of second track,	112.68	1.36	.....	.....	.....	114.04	.....	114.04
Miles of yard track and sidings,	118.62	35.52	40.81	3.94	.....	198.89	88.80	110.09
Total Mileage operated (all tracks),	447.99	180.75	193.01	23.91	12.46	858.12	90.35	755.31

b. MILEAGE OF LINE OPERATED BY STATES AND TERRITORIES.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Line Operated under Lease.	Line Operated under Contract, etc.	Line Operated under Trackage Rights.	Total Mileage Operated.	RAILS.	
	Main Line.	Branches and spurs.					Iron.	Steel.
Massachusetts,	52.05	50.45	26.39	19.97	1.41	150.27	.....	148.86
Rhode Island, . . . . .	.....	28.05	43.12	.....	.10	71.27	.....	71.17
Connecticut,	134.17	65.37	82.69	.....	.....	282.23	1.55	280.68
New York,	30.47	.....	.....	.....	10.95	41.42	.....	30.47
Total Mileage operated (single track),	216.69	143.87	152.20	19.97	12.46	545.19	1.55	531.18

c. MILEAGE OF LINE OWNED BY STATES AND TERRITORIES.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	RAILS.	
	Main Line.	Branches and spurs.		Iron.	Steel.
Massachusetts,	52.05	50.45	102.50	.....	102.50
Rhode Island, . . . . .	.....	28.05	28.05	.....	28.05
Connecticut,	134.17	65.37	199.54	1.55	197.99
New York,	30.47	.....	30.47	.....	30.47
Total Mileage owned (single track),	216.69	143.87	360.56	1.55	359.01

Renewals of Ties and Rails.

NEW RAILS LAID DURING YEAR.

Kind.	Tons.	Weight per Yard.	Average Price per Ton at Distributing Point.
Steel, }	1,044.93	79 lbs.	\$25.61
	42.86	75 "	32.28
	26.56	66 "	31.44
Total Steel,	1,114.35	.....	\$26.00

NEW TIES LAID DURING YEAR.

Kind.	Number.	Average Price at Distributing Point.
Hard Pine, Chestnut, and Oak, 1st class,	191,431	48 cts.
Hard Pine, Chestnut, and Oak, 2d class,	80,585	42 "
Hard Pine, Chestnut, and Oak, 3d class,	25,469	22 "
Total,	297,485	44 cts.

Consumption of Fuel by Locomotives.

Locomotives.	Bituminous Coal—Tons.	Total Fuel Consumed—Tons.	Miles Run.	Average Pounds Consumed per Mile.
Passenger,	71,617.70	71,617.70	2,177,873	65.77
Freight,	125,866.90	125,866.90	2,429,017	103.64
Switching,	32,482.90	32,482.90	1,094,172	59.37
Construction,	1,973.60	1,973.60	45,370	87.00
Total,	231,941.10	231,941.10	5,746,432	80.73
Average cost at distr. point,	\$2.66			

Do not use wood for firing locomotives and only scrap wood for kindlings.

Accidents to Persons—State of Connecticut.

EMPLOYEES.

Kind of Accident.	TRAINMEN.		SWITCHMEN, FLAGMEN, AND WATCHMEN.		OTHER EMPLOYEES.		TOTAL.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Coupling and Uncoupling.	..	22	..	21	..	1	..	44
Falling from Trains and Engines,	3	3	..	2	..	..	3	5
Overhead Obstructions, .	2	2	..	..	..	..	2	2
Collisions, . . . . .	..	1	..	..	..	..	..	1
Derailments, . . . . .	..	1	..	..	..	..	..	1
Other Train Accidents, .	..	1	..	..	..	1	..	2
Other Causes, . . . . .	..	8	..	..	3	3	3	11
Total,	5	38	..	23	3	5	8	66

OTHERS.

Kind of Accident.	PASSENGERS.		TRESPASSING.		NOT TRESPASSING.		TOTAL.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
At Highway Crossings, .	..	..	..	..	3	..	3	..
At Stations,	1	1	..	..	..	..	..	..
Other Causes, . . . . .	..	3	14	24	..	1	14	25
Total,	1	4	14	24	3	1	17	25

Accidents to Persons.—Continued.

OTHER CAUSES—EMPLOYEES.

Kind of Accident.	Train- men Injured.	Others Killed.	Others Injured.	Total Killed.	Total Injured.
Other Train Accidents :					
Train breaking in two,	1				1
Rough handling of cars,			1		1
Total,	1		1		2
Other Causes :					
Jumping on and off trains and engines,	1		1		2
Climbing between or under cars,		1		1	
Lying under car,	1				1
Walking, sitting, or lying on track,		1	1	1	1
Falling off bridge,	1				1
Striking mail stand,			1		1
Striking telegraph pole,	1				1
End-board of coal car falling,	1				1
Switching cars, striking too hard,	3				3
Scalded by steam from locomotive,		1		1	
Total,	8	3	3	3	11

Kind of Accident.	Passen- gers Injured.	Others Tres- passing Killed.	Others Tres- passing Injured.	Others not Tres- passing Injured.	Total Others Killed.	Total Others Injured.
Other Causes:						
Stealing ride,			3			3
Jumping on and off trains and engines,	2	1	3		1	3
Climbing between or under cars,			1			1
Coupling cars,			1			1
Walking, sitting, or lying on track,		13	15	1	13	16
Falling off bridge,			1			1
Window of coach falling,	1					
Total,	3	14	24	1	14	25

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.			Length of Level Line.		ASCENDING GRADES.			DESCENDING GRADES.		
From—	To—	Miles.	Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.	Miles.		No.	Sum of Ascents. Feet.	Aggregate length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate length of Descending Grades. Miles.
Boston	Hopewell Junc.,	214.98	343	85.00	129.98	34.98	.56	36	379.5	93.28	37	355.9	86.79
Worcester	Fishkill-on-Hud.,	1.71	6	.97	.74	*	*	1			1	6.3	1.15
Dedham Junction	Dedham,	1.53	4	.76	.77								
Islington	Dedham,	2.00	1	.25	1.75								
Hartford Freight	Branch,	.67	3	.32	.35	.67							
Providence	Willimantic,	58.32	59	25.39	32.33	9.76	.67	5	73.7	24.56	4	51.5	23.00
Dorrence St. Trk.	Providence,	.62	5	.10	.52	.38							
Cook St., Newton	Woonsocket,	28.67	30	6.96	21.71	6.86	.38	10	42.3	11.69	10	37.2	10.07
Franklin	Valley Falls,	13.59	29	4.71	8.88	2.82	.38	6	8.4	2.70	6	29.2	8.07
East Thompson	Southbridge,	17.36	39	7.74	9.02	6.18	.38	6	20.2	6.09	5	19.7	5.09
Worcester	Allyn's Point,	66.16	107	22.48	43.98	13.78	.08	14	14.3	11.72	16	62.4	40.66
Vernon	Rockville,	4.43	10	1.49	2.94	.08		1	14.6	2.66	1	7.4	1.69
Springfield	East Hartford,	27.48	27	4.94	22.54	5.31		15	20.5	7.38	15	32.7	14.79
Melrose	West St., R'kville,	7.22	13	2.01	5.21	2.73		3	20.8	3.38	3	4.5	1.11
Ashland	Franklin,	19.97	50	8.00	11.97	*							
Junc. B. & A. R. R.	Depot, Springfield,	1.41	1	.10	1.31			1	10.0	1.41			
Providence	Douglas Junction,	28.18	74	13.47	14.71	*							
Woonsocket	Harrisville,	9.50	19	3.55	5.95	*							
Waterbury	Cromwell,	30.34	72	14.56	15.78	6.23		24	77.9	12.68	20	56.0	11.43
Total,		534.14	892	203.40	330.74	90.34		121	682.2	177.55	119	663.2	204.09

* This company has no profile of the branches from Dedham Junction to Dedham, from Islington to Dedham, from Ashland to Franklin, from Providence to Douglas Junction, or from Woonsocket to Harrisville.

Characteristics of Road.—Continued.

BRIDGES, TRETTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.	MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Feet.	Inches.
Bridges:						
Stone,	48	955	..	6	50	..
Iron,	121	9,626	11	20	1,122	..
Wooden,	145	11,081	1	10	481	..
Total,	314	21,663	..	..	....	..
Trestles,	86	18,517	7	25	2,944	..
Tunnels,	5	1,307	..	176	340	..

HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:			
Bridges,	68	14	1
Trestles,	46	14	4
Total,	114	..	..
Overhead Railway Crossings:			
Bridges,	6	14	1
Tunnels,	5	16	..

GAUGE OF TRACK—4 feet, 8 $\frac{1}{2}$ inches ; 360.56 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
526.10	4,424.00	Western Union Tel. Co.	Western Union Tel. Co.

Car Mileage.

Individuals, Co-operative Fast Freight Lines, and Stock Companies, to which the Company making this Report pays Mileage for the use of Cars.

Armour Refrigerator Line.	Illinois Steel Co.
Arms Palace Horse Car Co.	Kansas City Dressed Beef Line.
American Refrigerator Transit Co.	Kansas City Refrigerator Car Co.
Ashland Coal and Iron Co.	Keystone Palace Horse Car Co.
Banner Refrigerator Line.	Manhattan Oil Co.
Blue Line.	Mather Stock Car Co.
Burton Stock Car Co.	Merchants Despatch Transportation Co.
Brill & Co., J. G.	Midland Line.
Canadian Pacific Despatch.	Morris & Co. Refrigerator Line.
California Fruit Express Co.	National Despatch Line.
Canada Cattle Car Co.	Narragansett Brewing Co.
Chicago Refrigerator Car Co.	Northwest Despatch Fast Freight Line.
Chicago, New York & Boston Transportation Co.	Peerless Refining Co.
Continental Refining Co.	Peavey Grain Line.
Continental Fruit Express.	Pittsburgh Plate Glass Co.
Cornplanter Refining Co.	Red Line Transit Co.
Cudahy Refrigerator Line.	St. Louis Refrigerator Car Co.
Cutting Car Co.	Southern Iron Car Co.
Crescent Oil Co.	Southern Despatch Lumber Line.
Erie Despatch.	Southern Freight Line.
Empire Line.	Swift Refrigerator Transportation Co.
Empire Oil Works.	Terre Haute Brewing Co.
Genesee Oil Works.	Tide Water Oil Co.
Hicks Stock Car Co.	Titusville Oil Works.
Havens & Co., C. B.	Union Tank Line.
Hammond Refrigerator Line.	Union Refrigerator Transit Co.
International Oil Works.	White Line Transit Co.

Oath.

STATE OF MASSACHUSETTS, }
COUNTY OF SUFFOLK, } ss.

We, the undersigned, J. T. Odell, Vice-President of the New York & New England Railroad Company and General Manager for the Receivers of the New York & New England Railroad Company, and W. H. Dudley, Auditor of the New York & New England Railroad Company, and Auditor for the Receivers of the New York & New England Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, informa-

tion, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

J. T. ODELL,

Vice-President of the New York & New England Railroad Company, and General Manager for the Receivers of the New York & New England Railroad Company.

W. H. DUDLEY,

Auditor of the New York & New England Railroad Company, and Auditor for the Receivers of the New York & New England Railroad Company.

Subscribed and sworn to before me this 14th day of September, 1894.

FRANK A. FARNHAM,

Justice of the Peace.

NEW YORK, NEW HAVEN & HARTFORD RAILROAD COMPANY.

History.

The name of the common carrier making this report is the New York, New Haven & Hartford Railroad Company.

The date of organization was August 6, 1872.

The Company was organized in the first instance under the laws of the States of Connecticut and Massachusetts (Conn. Pub. Acts, 1871, chap. 129; do chap. 144; Mass. Laws, 1872, chap. 171; Conn. Special Acts, 1873, 1, 6; Laws of N. Y., 1874, chap. 362; Special Laws of Conn., vol. vii, p. 688; do. vol. viii, p. 411; do. vol. ix, p. 1026; do. p. 1032; do. vol. x, p. 21; do. p. 80; do. p. 115; do. p. 212; do. p. 509; do. p. 1118; do. p. 1298; do. p. 1359; do. p. 1349; Resolution of Conn. Gen. Assembly, approved March 2, 1893; see also Resolutions of R. I. General Assembly, passed April 26, 1892, Feb. 24, 1893, and April 25, 1893; Acts and Resolutions of Mass., 1893, chap. 112).

The New York, New Haven & Hartford Railroad Company was formed by a consolidation, August 6, 1872, of the Hartford & New Haven Railroad Company with the New York & New Haven Railroad Company. The Hartford & New Haven Railroad Company prior to the last mentioned date had been consolidated with the Hartford & Springfield Corporation in 1847; with the Branch Company in 1850; with the Middletown Railroad Company in 1850; with the Middletown Extension Railroad Company in 1861; with the New Britain & Middletown Railroad Company in 1868; and with the Windsor Locks & Suffield Railroad Company in 1871 (Private Laws of Conn., vol. i, p. 1002; do. p. 1005; do. vol. iv, p. 898; do. p. 899; do. p. 890; do. p. 901; do. p. 967; do. p. 903; Mass. Special Laws, vol. ix, p. 448; Conn. Private Acts, 1855, p. 202; Private Laws of Conn., vol. v, p. 32; Mass. Special Laws, vol. xii, p. 582; Special Laws of Conn., vol. vi, p. 578; do. p. 791; Private Laws of Conn., vol. i, p. 1006; Conn. Private Acts, 1838, p. . . ; Private Laws of Conn., vol. iv, p. 916; do. p. 917; do. p. 918; do. p. 919; Conn. Private Acts, 1841, p. 82; Private Laws of Conn., vol. iv, p. 919; Mass. Special Laws, vol. viii, p. 116; Mass. Special Laws, vol. viii, p. 208; p. 321; do. p. 420; do. p. 809; Private Laws of Conn., vol. iv, p. 874; do. p. 934; do. 938; Incorporating the Middletown Extension Railroad Company, approved June 4, 1857; Conn. Private Acts, 1859, p. 152; Private Laws of Conn., vol. iv, p. 954; do. p. 957; Conn. Private Acts, 1858, p. 126; Conn. Private Acts, 1860, p. 97; do. 1862, p. 96; do. 1864, p. 158; Private Laws of Conn., vol. v, p. 570;

Special Laws of Conn., vol. vi, p. 323; do. p. 594; Private Laws of Conn., vol. iv, p. 1, 1020; do. p. 1025; Laws of N. Y., 1846, chap. . .; Private Laws of Conn., vol. iv, p. 1025; Laws of N. Y., 1848, chap. . .; Private Laws of Conn., vol. iv, p. 1029; do. p. 1031; Conn. Private Acts, 1866, p. 194; Special Laws of Conn., vol. vi, p. 88; do. p. 137; do. p. 226; do. p. 319; do. p. 716; do. p. 677; do. p. 834; Conn. Public Acts, 1871, chap. 152).

At the time of the consolidation of the Hartford & New Haven Railroad Company with the New York & New Haven Railroad Company, the former Company had a proprietary interest in the Company for erecting and supporting a toll bridge from New Haven to East Haven (Private Laws of Conn., vol. i, p. 241; do. p. 242; do. p. 243; do. vol. iii, p. 283; Special Laws of Conn., vol. vi, p. 182; do. vol. viii, p. 310; do. vol. x, p. 79); and the New York & New Haven Railroad Company was the lessee in perpetuity of the railroad of the Shore Line Railway, which was a successor in 1864 to the New Haven, New London & Stonington Railroad Company, which was formed by a merger in 1856 of the New Haven & New London Railroad Company with the New London & Stonington Railroad Company (Private Laws of Conn., vol. iv, pp. 967, 973; U. S. Statutes at Large, vol. ix, Private Acts, chap. 47, p. 165; Private Laws of Conn., vol. iv, pp. 974, 975, 978, 979; Private Laws of Conn., vol. v, pp. 47, 205, 227, 243; Conn. Private Acts, 1859, p. 151; Private Laws of Conn., vol. v, pp. 590, 766; Special Laws of Conn., vol. iv, pp. 327, 394; U. S. Statutes at Large, vol. xv, chap. 38, p. 273; Special Laws of Conn., vol. iv, pp. 906, 919; do. vol. viii, p. 364).

The New York, New Haven & Hartford Railroad Company consolidated with the Stamford & New Canaan Railroad Company, successor of the New Canaan Railroad Company, on the first day of October, 1890 (Special Laws of Conn., vol. vi, pp. 22, 10; Conn. Special Acts, 1876, p. 66; Special Laws of Conn., vol. viii, p. 196; Conn. Special Acts, 1880, p. 75; Special Laws of Conn., vol. ix, p. 682; Special Laws of Conn., vol. ix, p. 859; Public Acts of Conn., 1883, chap. 130; Gen. Statutes of Conn., sec. 3471; Public Acts of Conn., 1889, chap. 92).

With the Hartford & Connecticut Valley Railroad Company, successor of the Connecticut Valley Railroad Company, on the 21st day of December, 1892 (Special Laws of Conn., vol. vi, pp. 398, 548, 613, 652, 658; Conn. Private Acts, 1870, p. 196; Special Laws of Conn., vol. vii, pp. 63, 378, 555, 634; Conn. Public Acts, 1874, chap. 64; Special Laws of Conn., vol. vii, pp. 810, 929; do. vol. viii, pp. 39, 83; Conn. Special Acts, 1877, p. 122; Special Laws of Conn., vol. viii, p. 223; Conn. Special Acts, 1879, p. 5; Special Laws of Conn., vol. viii, p. 348; Mass. Special Laws, vol. xiv, p. 660; Special Laws of Conn., vol. viii, p. 420; Conn. Special Acts, 1880, p. 115; Special Laws of Conn., vol. ix, p. 203; Mass. Special Laws, vol. xv, p. 53; Special Laws of Conn., vol. ix, pp. 614, 679; Gen. Statutes of Conn., sec. 3471; Public Acts of Conn., 1889, chap. 93).

With the New York, Providence & Boston Railroad Company on the 13th day of February, 1893 (Private Laws of Conn., vol. i, pp. 1019, 1023; do. vol. iv, pp. 1032, 1033, 975, 978, 979; do. vol. v, pp. 47, 205, 227, 243; Conn. Private Acts, 1859, p. 151; Private Laws of Conn., vol. v, p. 592; Special Laws of Conn., vol. vi, p. 374; do. vol. vii, p. 938; do. vol. viii, p. 4; do. vol. ix, pp. 28, 503; do. vol. x, pp. 115, 1150; R. I. Acts and Resolutions, June, 1832, p. 67; do. June, 1833, p. 10; do. 1836, p. 3; do. January, 1840, p. 83; Mass. Special Laws, vol. viii, pp. 179, 221; R. I. Acts and Resolutions, January, 1841, p. 8; Mass. Special Laws, vol. viii, p. 307; R. I. Acts and Resolutions, October, 1846, p. 86; do. May, 1847, p. 57; do. October, 1847, p. 48; do. January, 1848, p. 32; do. June, 1851, p. 44; do. January, 1852, p. 5; do. January, 1853, p. 262; do. May, 1858, p. 51; do. January, 1862, p. 239; do. June, 1864, p. 32; do. January, 1865, p. 26; do. May, 1868, p. 27; do. June, 1868, p. 42; do. January, 1872, p. 184; do. January, 1873, p. 206; do. May, 1874, p. 12; do. January, 1875, p. 261; do. May, 1875, p. 42; do. January, 1876, p. 191; do. January, 1880, p. 142; do. January, 1881, pp. 174, 178; do. January, 1885, p. 197; Passed by R. I. Gen. Assembly; March 23, 1888; Passed by R. I. Gen. Assembly, June 1, 1888; Passed by R. I. Gen. Assembly, June 13, 1888; Passed by R. I. Gen. Assembly, May Session, May, 1891; Passed by R. I. Gen. Assembly, January Session, 1891; Passed by R. I. Gen. Assembly, January Session, 1892; Passed by R. I. Gen. Assembly, January Session, 1893).

At the time of the consolidation of the New York, New Haven & Hartford Railroad Company with the New York, Providence & Boston Railroad Company, the latter Company was the lessee of the railroad of the Pawtuxet Valley Railroad Company for 99 years from July 1, 1884. (See Acts passed by R. I. Gen. Assembly in 1868, 1869, 1872, 1873, 1874, 1875, 1877, 1879, 1880, 1881.)

The New York, New Haven & Hartford Railroad Company is now (June 30, 1894) the direct lessee—

(1) For 99 years from the first day of October, 1873, of the railroad of the Harlem River & Port Chester Railroad Company (Laws of N. Y., 1866, chap. 763; do. 1869, chap. 722; do. 1871, chap. 605; do. 1873, chap. 48).

(2) For 99 years from the 30th day of September, 1882, of the railroad of the Boston & New York Air Line Railroad Company, successor in 1875 of the New Haven, Middletown & Willimantic Railroad Company, and lessee in 1878, for 999 years, of the railroad of the Colchester Railroad Company (Special Laws of Conn., vol. vi, pp. 286, 329, 462; U. S. Statutes at large, vol. xv, chap. 37, p. 272; Special Laws of Conn., vol. vi, p. 577; do. p. 613; do. p. 652; do. p. 794; do. p. 807; do. vol. vii, pp. 2, 31, 145, 273; Conn. Special Acts, 1872, p. 190; Special Laws of Conn., vol. vii, pp. 543, 554, 555; Conn. Public Acts, 1874, chap. lxiv, p. 217; Special Laws of Conn., vol. vii, p. 767; Conn. Special Acts, 1874, p. 271; Special Laws of Conn., vol. vii, p. 885; Conn. Special Acts, 1875, p. 178; Special Laws of Conn., vol. viii, pp. 17, 228; Conn. Special Acts, 1879, p. 137; Special Laws of Conn., vol. ix, p. 1009; Special Laws of Conn., vol. viii, p. 34).

(3) For 99 years from the first day of April, 1887, of the railroad of the New Haven & Northampton Company, successor (1836) of the President, Directors, and Company of the Farmington Canal and of the Hampshire & Hampden Canal Company, assignee (1859) of the lessee of the Farmington Valley Railroad; consolidated (1862) with the Hampshire & Hampden Railroad Corporation—a corporation formed by the merger (1853) of the Hampshire Railroad Company with the Northampton & Westfield Railroad Company; and lessee (1870) in perpetuity of the Holyoke & Westfield Railroad (Conn. Private Laws, vol. i, pp. 300, 318, 307, 308; Mass. Special Laws, vol. vi, pp. 40, 320, 702, 829; do. vol. vii, pp. 186, 675, 691; Conn. Private Laws, vol. i, p. 308; do. vol. iii, p. 294; do. vol. iv, pp. 1380, 1384, 888; Conn. Private Acts, 1847, p. 104; Conn. Private Laws, vol. lv, pp. 982, 983, 984, 985, 993, 985, 986; Conn. Private Acts, 1858, p. 125; do. 1862, p. 94; do. 1867, p. 275; Mass. Special Laws, vol. ix, pp. 546, 561, 767, 773; do. vol. x, pp. 552, 742, 922; do. vol. xi, p. 286; Conn. Private Laws, vol. v, p. 460; Mass. Special Laws, vol. ii, p. 653; Conn. Private Laws, vol. v, p. 724; Mass. Special Laws, vol. xii, p. 25; Conn. Special Laws, vol. vi, pp. 217, 303; Mass. Special Laws, vol. xii, p. 736; Conn. Special Laws, vol. vi, p. 733; Mass. Special Laws, vol. xii, p. 822; Conn. Private Acts, 1870, p. 146; do. p. 198; Conn. Special Laws, vol. vii, p. 267; Mass. Special Laws, vol. xiii, p. 484; Conn. Special Laws, vol. vii, p. 871; Conn. Special Acts, 1875, p. 130; Conn. Special Laws, vol. vii, p. 987; Conn. Special Acts, 1876, p. 119; Mass. Special Laws, vol. xiv, p. 386; Conn. Special Laws, vol. viii, p. 296; Mass. Special Laws, vol. xiv, p. 485; Conn. Special Laws, vol. viii, pp. 419, 420; Mass. Special Laws, vol. xiv, p. 623; do. vol. xv, p. 677, 1430; Mass. Special Laws, vol. xii, p. 804; do. vol. xiii, p. 558; Acts and Resolutions of Mass., 1893, chap. 72).

(4) For 99 years from the first day of April, 1887, of the railroad of the Naugatuck Railroad Company, including its proprietary interest in the Watertown & Waterbury Railroad (Private Laws of Conn., vol. iv, pp. 944, 949, 950, 951, 952; do. vol. v, pp. 75, 753; Special Laws of Conn., vol. vi, pp. 8, 9, 23, 293, 709, 874, 647; do. vol. x, p. 1118).

(5) For 99 years from July 1, 1892, of the railroad of the Providence & Worcester Railroad Company (R. I. Acts, passed 1844, 1845, 1848, 1849, 1851, 1852, 1870, 1879, 1888, 1889, 1893; Mass. Acts, passed 1844, 1847, 1860, 1868, 1869, 1870, 1871, 1873, 1875, 1886, 1888, 1889, 1893).

(6) For 99 years from July 1, 1892, of the railroad of the Housatonic Railroad Company (Private Laws of Conn., vol. i, p. 1025; do. vol. iv, pp. 921, 922, 924, 925, 926, 927; Private Acts of Conn., 1850, p. —; Private Laws of Conn., vol. v, p. 578; Conn. Private Acts, 1870, p. 115; Special Laws of Conn., vol. viii, p. 198; do. vol. ix, pp. 229, 422, 617, 844, 1006; Conn. Public Acts, 1889, chap. clxvi; Mass. Special Laws, vol. viii, p. 827; Mass. Acts and Resolutions, 1873, chap. 168; do. 1881, chap. 228; do. 1882, chap. 57; do. 1885, chap. 338; do. 1892, chap. 297).

(7) For 99 years from July 1, 1892, of the railroad of the New Haven & Derby Railroad Company (Private Laws of Conn., vol. v, p. 653; Conn. Private Acts, 1867, p. 265; Special Laws of Conn., vol. vi, p. 171; Conn. Private Acts, 1867, p. 53; Special Laws of Conn., vol. vi, pp. 673, 826, 874; do. vol. vii, pp. 114, 251, 343; do. vol. viii, p. 55; Conn. Special Acts, 1885, p. 23; do. 1886, p. 385).

(8) For 99 years from July 1, 1892, of the railroad of the Danbury & Norwalk Railroad Company, formerly the Fairfield County Railroad Company (Private Laws of Conn., vol. i, p. 998; do. vol. iv, pp. 885 and 886; Special Laws of Conn., vol. vi, pp. 373, 48, 655; do. vol. viii, p. 418; do. vol. ix, pp. 329, 949).

(9) For 99 years from March 1, 1893, of the railroad and property of the Old Colony Railroad Company, including its interests as lessee of the Boston & Providence, the Nantasket Beach, the Fall River, the Attleborough Branch, the Chatham, the Providence, Warren & Bristol, and the Plymouth and Middleborough Railroads (Mass. Acts, 1844, chaps. 150, 100; 1845, chaps. 226, 234; 1862, chap. 48; 1863, chap. 29; 1854, chap. 55; 1846, chap. 228; 1826, chap. 183; 1870, chap. 397; 1846, chap. 194; 1861, chap. 109; 1868, chap. 122; 1848, chap. 162; 1846, chap. 152; 1867, chap. 65; 1835, chap. 131; 1838, chap. 103; 1846, chap. 247; 1847, chaps. 269, 189; 1849, chap. 169; 1867, chap. 83; 1870, chap. 113; 1846, chap. 185; 1857, chap. 25; 1845, chaps. 126, 226, 241, 120; 1846, chaps. 228, 178, 152, 185, 232; 1847, chaps. 85, 162, 187, 201; 1848, chaps. 84, 151, 180; 1849, chaps. 163, 169; 1850, chaps. 260, 268; 1852, chap. 124; 1854, chap. 133; 1857, chap. 162; 1858, chap. 171; 1861, chaps. 109, 137, 156; 1862, chap. 149; 1863, chap., 238; 1865 chap. 102; 1864, chaps. 18, 101, 155; 1866, chaps. 97, 155; Resolve 57; 1867, chaps. 74, 170, 201, 271; 1868, chaps. 97, 122, 175, 189; 1869, chaps. 21, 71, 461; 1870, chaps. 47, 378, 379, 397, 398; 1871, chaps. 54, 104, 257, 288, 325; 1872, chaps. 28, 92, 143, 295; 1873, chaps. 9, 146, 187, 198; 1874, chaps. 55, 63, 183, 213; 1876, chaps. 40, 135; 1877, chap. 9; 1878, chap. 150; 1879, chap. 140; 1880, chaps. 238, 245; 1881, chap. 14; 1882, chaps. 19, 62, 80; 1883, chap. 134; 1884, chaps. 11, 47; 1887, chaps. 222, 351, 415; 1888, chaps. 42, 43; 1889, chaps. 223, 331; 1890, chaps. 150, 246; 1891, chaps. 359, 397; 1892, chaps. 393, 93, 194, 433; 1893, chaps. 178, 463, 451, 126, 127; 1894, chaps. 226, 156, 338, 392).

(10) For 99 years from April 1, 1893, of the railroad of the Berkshire Railroad Company (Mass. Special Laws, vol. vii, p. 785; do. vol. viii, pp. 249, 460, 827; Mass. Acts and Resolutions, 1873, chap. 168; do. 1885, chap. 338).

(11) For 99 years from April 1, 1893, of the railroad of the Stockbridge & Pittsfield Railroad Company (Mass. Special Laws, vol. viii, p. 733; Mass. Acts and Resolutions, 1866, chap. 126; do. 1871, chap. 162; do. 1873, chap. 168; do. 1885, chap. 338).

(12) For 99 years from April 1, 1893, of the railroad of the West Stockbridge Railroad Corporation (Mass. Special Laws, vol. vii, p. 645; do. vol. viii, pp. 2, 167; do. vol. x, p. 442).

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
E. H. TROWBRIDGE,		Died November, 24, 1893.
WILLIAM D. BISHOP,	Bridgeport, Conn.,	October 17, 1894.
NATHANIEL WHEELER,		Died January 1, 1894.
HENRY C. ROBINSON,	Hartford, Conn.,	October 17, 1894.
CHARLES P. CLARK,	New Haven, Conn.,	" "
JOSEPH PARK,	New York City,	" "
CHAUNCEY M. DEPEW,	" "	" "
HENRY S. LEE,	Springfield, Mass.,	" "
WILLIAM ROCKEFELLER,	New York City,	" "
LEVERETT BRAINARD,	Hartford, Conn.,	" "
J. PIERPONT MORGAN,	New York City,	" "
GEO. MACCULLOCH MILLER,	" "	" "
JOHN M. HALL,	New Haven, Conn.,	" "
CHARLES F. CHOATE,	Boston, Mass.,	" "
NATHANIEL THAYER,	" "	" "
ROYAL C. TAFT,	Providence, R. I.,	" "
CHARLES F. BROOKER,	Torrington, Conn.,	" "
CARLOS FRENCH,	Seymour, "	" "
GEORGE J. BRUSH,	New Haven, "	" "

Total number of stockholders at date of last election. 6,070.

Date of last meeting of stockholders for election of directors. October 18, 1893.

Post-office address of general office. New Haven, Conn.

Post-office address of operating office. New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed. H. M. Kochersperger, Comptroller, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	CHARLES P. CLARK,	New Haven, Conn.
First Vice-President,	JOHN M. HALL,	" "
Second Vice-President,	C. S. MELLEN,	" "
Third Vice-President,	J. R. KENDRICK,	Boston, Mass.
Secretary,	WILLIAM D. BISHOP, JR.,	Bridgeport, Conn.
Treasurer,	WILLIAM L. SQUIRE,	New Haven, Conn.
Comptroller,	H. M. KOCHERSPERGER,	" "
Chief Engineer,	F. S. CURTIS,	" "
General Superintendent,	C. H. PLATT, (N. H. System),	" "
" "	E. G. ALLEN (Old Col. System),	Boston, Mass.

DIVISION SUPERINTENDENTS.

New Haven System :

Supt. N. Y. Division,	O. M. SHEPARD,	New York City.
Supt. Hartford "	C. S. DAVIDSON,	Hartford, Conn.
Supt. N. London "	W. A. WATERBURY,	New Haven, Conn.
Supt. Air Line "	A. S. OSTRANDER,	" "

Officers.—Continued.

Title.	Name.	Location of Office.
<i>New Haven System :</i>		
Supt. N'thampton Div.,	R. G. CURTIS,	New Haven, Conn.
Supt. Naugatuck "	GEORGE W. BEACH,	Waterbury, "
Supt. Valley "	J. V. A. TRUMBULL,	Hartford, "
Supt. Berkshire "	J. P. HOPSON,	New Haven, "
Supt. Danbury "	F. C. PAINE,	Danbury, "
<i>Old Colony System :</i>		
Supt. Providence "	I. N. MARSHALL,	Boston, Mass.
Supt. Stonington "	J. B. GARDINER,	Providence, R. I.
Supt. Worcester "	F. G. SPENCER,	" " "
Supt. Northern "	C. A. MCALPINE,	S. Framingham, Mass.
Supt. Plymouth "	J. C. SANBORN,	Boston, Mass.
Supt. Taunton "	A. L. ACKLEY,	Taunton, Mass.
Supt. Cape Cod "	J. H. FRENCH,	Hyannis, Mass.
Passenger Traffic Manager,	GEORGE L. CONNOR,	New Haven, Conn.
General Freight Agent,	N. A. WILLCOX (N. H. System),	" " "
" " "	C. PETER CLARK (Old Col. "),	Boston, Mass.
General Passenger Agent,	C. T. HEMPSTEAD N. H. "),	New Haven, Conn.
" " "	A. C. KENDALL (Old Col. "),	Boston, Mass.
General Ticket Agent,	J. N. STATES,	New Haven, Conn.
General Baggage Agent,	GEORGE A. MORTON,	" " "

Property Operated.

Name of every railroad the operations of which are included in the Income Account (p. 275):

1. Railroad Line represented by Capital Stock: *a.* Main Line. *b.* Branches and Spurs. 2. Proprietary Companies whose entire Capital Stock is owned by this Company. 3. Line Operated under Lease for specified sum. 4. Line Operated under Contract, or where the Rent is contingent upon earnings or other considerations. 5. Line Operated under Trackage Rights.

Name.	TERMINALS.		Miles of Line for each Road Named.	Miles of Line for each class of Roads Named.
	From —	To —		
1 <i>a.</i> N. Y., N. H. & H. R. R.,	Woodlawn Jct., N. Y.	Springfield, Mass.	122.44	
1 <i>b.</i> New Canaan Branch,	Stamford, Ct.	New Canaan, Ct.	7.66	
Connection at	New Haven with	West River Br.	.87	
West River Branch,	Connecting with	N. H. & D. R. R.	.79	
Belle Dock "	Shore Line Jct.	Belle Dock, N. H.	1.00	
New Britain "	Berlin, Ct.	New Britain, Ct.	3.18	
Middletown "	Berlin, "	Middletown, "	9.70	
Freight " at	Hartford, "	" "	.84	
Valley Division,	Hartford, "	Fenwick, "	46.20	
Suffield Branch,	Windsor Locks, "	Suffield, "	4.32	
Stonington Division,	New London, "	Providence, R. I.	62.11	
Loop Branch at	Stonington, "	" "	.97	
Groton Branch,	Groton, "	Poquonock, Ct.	4.10	
Buttonwoods Branch,	Auburn, R. I.	Buttonwoods, R. I.	9.90	
Pontiac "	Auburn, "	Pontiac, "	4.69	
Henderson St. "	Auburn, "	Hend'n St., Prov.	3.58—	282.35
2 & 3. Harlem R. & Pt. C. R. R.	Harlem River, N. Y.	New Rochelle, N. Y.	11.50	
West Stockbridge R. R.,	W. Stockbridge, Mass.	N. Y. State Line.	2.64—	14.14
3. Danbury & Norwalk R. R.,	Danbury, Ct.	Wilson Point, Ct.	26.28	
Ridgefield Branch,	Branchville, "	Ridgefield, "	3.97	
Housatonic Railroad,	Bridgeport, "	Mass. State Line.	74.97	
Botsford Branch,	Botsford, "	Huntington, Ct.	9.79	
Danbury "	Brookfield Jct., "	Danbury, "	5.36	
Berkshire Railroad,	Conn. State Line,	W. Stockbridge, Mass.	20.53	
Stockbridge & Pittsfield R. R.	V. Densenville, Mass.	Pittsfield, "	22.02	
Naugatuck Railroad,	Naugatuck Jct., Ct.	Winsted, Ct.	56.55	
Watertown Branch,	Waterbury, "	Watertown, "	4.44	

Property Operated.—Continued.

Name.	TERMINALS		Miles of Line for each Road Named.	Miles of Line for each class of Roads Named.
	From —	To —		
New Haven & Derby Railroad,	New Haven,	Ct. Ansonia,	Ct. 12.90	
Huntington Branch,	Derby,	" Huntington,	" 3.79	
Boston & N. Y. Air Line Ry.,	New Haven,	" Willimantic,	" 51.50	
Colchester Railroad,	Turnerville,	" Colchester,	" 3.59	
N. H. & Northampton R. R.,	New Haven,	" Conway Jct., Mass.	94.64	
New Hartford Branch,	Farmington,	" New Hartford, Ct.	14.69	
Williamsburg "	Northampton,	Mass. Williamsburg, Mass.	7.51	
Turner's Falls "	So. Deerfield,	" Turner's Falls,	" 10.07	
Shore Line Railway,	New Haven,	Ct. New London, Ct.	48.53	
Pawtuxet Valley Railroad,	Pontiac,	R. I. Hope, R. I.	5.67	
Providence & Worcester R. R.,	Providence,	" Worcester, Mass.	*40.90	
E. Providence Branch,	Valley Falls,	" E. Providence, R. I.	7.00	
Prov., Warren & Bris. R. R.,	India Point,	" Bristol,	13.60	
Branch at	India Point,	" "	.75	
Boston & Providence R. R.,	Boston,	Mass. Providence, R. I.	*41.50	
India Point Branch,	East Junction,	" India Point,	" 8.05	
West Roxbury "	Forrest Hills,	" Dedham, Mass.	5.37	
Dedham "	Readville,	" Dedham,	" 2.22	
Stoughton "	Canton Jct.	" Stoughton,	" 4.05	
Old Colony R. R.,—Main Line,	Boston,	" Newport, R. I.	67.79	
" " "	Mayflower,	" Somerset Jct., Mass.	36.31	
" " "	Middleboro,	" Provincetown,	85.66	
" " "	Raynham,	" Whittenton Jct.,	" 3.38	
" " "	Braintree,	" Kingston,	32.34	
" " "	So. Braintree,	" Plymouth,	26.04	
" " "	Framingham,	" Lowell,	26.12	
" " "	New Bedford,	" Fitchburg,	91.25	
Dorchester & Milton Branch,	Neponsett,	" Mattapan,	" 3.30	
Stoughton Branch,	Junction,	" Stoughton,	" 1.65	
Shawmut "	Harrison Sq.	" Shawmut,	" 2.39	
Bridgewater "	Whitman,	" B'water I. Wks.,	" 6.12	
Brockton "	Elmwood,	" Westdale,	" .75	
Granite "	Atlantic,	" Braintree,	" 5.41	
Hyannis "	So. Yarmouth,	" Hyannis,	" 5.05	
Woods Holl "	Buzzard's Bay,	" Woods Holl,	17.54	
Fairhaven "	Tremont,	" Fairhaven,	15.17	
Hanover "	No. Abington,	" Hanover,	7.80	
Easton "	Matfield,	" Easton,	7.56	
P. & M. R. R. Extension,	at	" Middleboro,	" .42	
Middleboro & Taunton Br'ch,	Middleboro,	" M. & T. Junction,	8.04	
Attleboro Branch,	Attleboro Jct.	" Attleboro,	8.60	
Whittenton Y Branch,	Attleboro Jct.,	" Whittenton,	" .98	
Sterling "	Pratt's Jct.,	" Sterling Junction,	5.03	
Lancaster "	Lancaster Jct.,	" Lancaster Mills, Mass.	1.63	
Marlboro "	Marlboro Jct.,	" Marlboro,	1.47	
Prison "	So. Framingham,	" Woman's Ref'mty.	.62	
Wrentham "	Walpole Jct.,	" No. Attleboro, Mass.	12.85	
Walpole & Dedham Branch,	Walpole Jct.,	" Norwood Jct.,	5.76	
F. R., W. & B. Branch,	Fall River,	" Warren,	7.95	
P. & W. R. R. Connection,	" "	" "	.22	
Attleboro Branch R. R.,	Attleboro,	" No. Attleboro, Mass.	4.00	
Nantasket Beach R. R.,	Old C. House,	" Pemberton,	6.95	
Plymouth & Middleboro R. R.,	Plymouth,	" Middleboro,	15.03	1,120.82
4. Holyoke & Westfield R. R.,	Holyoke,	Mass. Westfield,	Mass. 10.32	
Fall River Railroad,	New Bedford,	" Fall River,	" 12.25	
Chatham Railroad,	Harwich,	" Chatham,	" 7.07	29.64
5. New York & Harlem Railroad,	Woodlawn,	N. Y. G'd Cent. Depot, N. Y.	12.03	
Fitchburg Railroad,	Conway Jct.,	Mass. Shelburne Falls, Mass.	4.67	
New York & N. E. Railroad,	Junction to Station.	" Willimantic, Ct.	.36	
Boston & Albany Railroad,	" "	" Worcester, Mass.	.15	
New York & N. E. Railroad,	Dedham,	Mass. Islington Junction.	2.00	
" " "	Islington Junction.	" Norwood Junction.	2.55	
Boston & Maine Railroad,	Junction to Station.	" Lowell, Mass.	.57	22.33
Total Mileage Operated, . . . . .			.....	1,469.28

* Includes only one-half of joint track between Providence Station and Boston Switch, a distance of 5 miles.

Property Operated.—Continued.

Name of all Coal, Bridge, Canal, or other Properties, the Earnings and Expenses of which affect the General Balance Sheet, (p. 282).

Name.	Title.	State or Territory.
* Union Wharf Co., New Haven,	Owued.	Connecticut.

* The income from this property is carried direct to the Profit and Loss Account, as shown on page 275.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					* Rate.	Amount.
Common,	1,000,000	\$100.00	\$100,000,000	\$37,942,900.00	2½ per ct	\$3,631,292.50

* Paid 2½ per cent. on \$32,973,000.00.

Paid 2½ per cent. on \$37,942,900.00.

Paid 2½ per cent. on \$36,792,900.00.

Paid 2½ per cent. on \$37,942,900.00.

Manner of Payment for Capital Stock.	Number of Shares Issued during Year.	Cash Realized on Amount Issued during Year.	Total No. Shares Issued and Outstanding.	Total Cash Realized.
Issued for cash, Oct. 1, '89, Com.,			31,000	\$3,100,000
Issued for cash, Oct. 1, '91, Com.,			46,750	4,675,000
Issued for stock of N. Y. & N. H. R. R. Co. and stock of Hartford & New Haven R. R. Co.,			155,000	15,500,000
Issued for stock of Stamford & New Canaan R. R. Co.,			1,000	100,000
Issued for stock of N. Y., P. & B. R. R. Co.,			50,000	5,000,000
Issued for stock of Hartford & Conn. Valley R. R. Co.,			8,000	800,000
Issued for stock of leased lines,	50,049	\$5,004,900	87,679	8,767,900
Total.	50,049	\$5,004,900	379,429	\$37,942,900

STOCKS OF LEASED LINES RECEIVED IN EXCHANGE FOR STOCK OF NEW YORK,
NEW HAVEN & HARTFORD RAILROAD COMPANY.

New Haven & Northampton Company, 24,035 shares for 9,614 shares of N. Y., N. H. & H.,	\$961,400.00
Boston & New York Air Line Railroad, 15,725 shares for 6,290 shares of N. Y., N. H. & H.,	629,000.00
Shore Line Railway, 8,068 shares for 6,051 shares of N. Y., N. H. & H.,	605,100.00
Naugatuck Railroad, 9,551 shares for 9,551 shares of N. Y., N. H. & H.,	955,100.00
Housatonic Railroad, 25,504 shares for 3,188 shares of N. Y., N. H. & H.,	318,800.00
Danbury & Norwalk Railroad, 8,928 shares for 2,232 shares of N. Y., N. H. & H.,	223,200.00
New Haven & Derby Railroad, 3,497 shares for 1,076 shares of N. Y., N. H. & H.,	107,600.00
Berkshire Railroad, 10 shares for 6 shares of N. Y., N. H. & H.,	600.00
Stockbridge & Pittsfield Railroad, 15 shares for 9 shares of N. Y., N. H. & H.,	900.00
Old Colony Railroad, 55,180 shares for 49,662 shares of N. Y., N. H. & H.,	4,966,200.00
87,679 shares of N. Y., N. H. & H.,	\$8,767,900.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
First Mortgage, 1st Mtg. N. Y., P. & B.,	1883	1903	\$5,000,000	\$2,000,000	\$2,000,000	\$2,047,971.09
1st Mtg. N. Y., P. & B.,	1869	1899	1,000,000	1,000,000	1,000,000	1,000,000.00
1st Mtg. N. Y., P. & B.,	1881	1901	300,000	300,000	300,000	300,000.00
Gen'l Mtg. N. Y., P. & B.,	1892	1942	4,000,000	1,000,000	1,000,000	1,000,000.00
Total,	.....	.....	\$10,300,000	\$4,300,000	\$4,300,000	\$4,347,971.09

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
4 per cent.	June and December.	\$80,000.00	\$80,000.00
7 per cent.	January and July.	70,000.00	70,000.00
4 per cent.	April and October.	12,000.00	12,000.00
4 per cent.	April and October.	40,000.00	40,000.00
Total,	.....	\$202,000.00	\$202,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mtge. Bds. (p. 272),	\$4,300,000.00	\$4,300,000.00	\$202,000.00	\$202,000.00

Current Assets and Liabilities.

Cash and Current Assets available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$1,426,891.45 Bills Receivable, 410,752.15 Due from Agents, 488,758.70 Due from Solvent Companies and Individuals, . . 709,768.08 Other Cash Assets, 9,631.41 Trustees of Subscriptions to Conv. Deben. Cfts., . . 482,079.91 Prop. 266 South St., N. Y., . 90,000.00 Total—Cash & Cur. As'ts, \$3,617,881.70 Bal.—Current Liabilities, 1,252,636.55 Total, \$4,870,518.25	Loans and Bills Payable, \$3,000,000.00 Audited vouchers and 1,253,686.33 accounts, 231,711.25 Wages and Salaries, 317,981.06 Net Traffic Balances due other companies, 4,768.00 Dividends not called for, 1,405.00 Mat. Int. Coupons unpaid, 60,966.61 Rents due July 1, Total—Current Liabilities, \$4,870,518.25 Total, \$4,870,518.25

Materials and Supplies on hand, \$2,139,991.95.

Recapitulation.

a. For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 271),	\$37,942,900.00	\$37,942,900.00	282.35	\$134,382.50
Bonds (p. 272),	4,300,000.00	4,300,000.00	282.35	15,229.33
Current Liab. (p. 273),	4,870,518.25	4,870,518.25	282.35	17,249.93*
 Total,	 \$47,113,418.25	 \$47,113,418.25	 282.35	 \$166,861.76

* This debt was incurred for account of all road operated, and the entire amount should not, therefore, be confined to "road owned."

Recapitulation—Continued.

b. For mileage operated by road making this report (trackage rights excluded), the operations of which are included in the income account (p. 275):

Name of Road.	Capital Stock.	Funded Debt.	Current Liabilities.	Total.	AMOUNT PER MILE OF LINE.	
					Miles.	Amount.
N. Y., N. H. & Hartford,	\$37,942,900.00	\$1,300,000.00	\$4,870,518.2	\$47,113,418.25	282.35	\$166,862
Harlem Riv. & Pitchester	42,250.00	3,000,000.00	.....	3,042,250.00	11.50	264,543
West Stockbridge,	39,600.00	.....	.....	39,600.00	2.64	15,000
Danbury & Norwalk,	600,000.00	650,000.00	.....	1,250,000.00	36.20	*\$4,530
Housatonic,	2,893,900.00	3,000,000.00	.....	5,893,900.00	90.12	65,456
Berkshire,	600,000.00	.....	.....	600,000.00	20.53	29,226
Stockbridge & Pittsfield,	448,700.00	.....	.....	448,700.00	22.02	20,377
Naugatuck,	2,000,000.00	150,000.00	.....	2,150,000.00	60.99	35,252
New Haven & Derby,	447,000.00	1,280,000.00	.....	1,727,000.00	16.69	103,475
Boston & N. Y. Air Line,	3,863,640.88	500,000.00	.....	4,363,640.88	51.50	84,731
Colchester,	25,000.00	.....	.....	50,000.00	3.50	13,928
N. Haven & N'hampton,	2,460,000.00	3,900,000.00	.....	6,360,000.00	126.31	50,352
Shore Line Railway,	1,000,000.00	200,000.00	.....	1,200,000.00	48.53	24,727
Pawtuxet Valley,	100,900.00	160,000.00	.....	260,900.00	5.67	46,014
Providence & Worcester,	3,500,000.00	1,500,000.00	.....	5,000,000.00	47.90	104,385
Prov., Warren & Bristol,	437,300.00	.....	.....	437,300.00	14.35	30,474
Boston & Providence,	4,000,000.00	2,170,000.00	.....	6,170,000.00	61.19	100,833
Old Colony,	14,178,900.00	13,178,200.00	556,554.23	27,913,654.23	495.20	56,368
Attleboro Branch,	131,700.00	.....	.....	131,700.00	4.00	32,925
Nantasket Beach,	.....	250,000.00	.....	250,000.00	6.95	35,971
Plymouth & Middleboro,	80,000.00	225,000.00	.....	305,000.00	15.03	20,293
Holyoke & Westfield,	260,000.00	260,000.00	.....	520,000.00	10.32	50,388
Fall River,	200,000.00	200,000.00	.....	400,000.00	12.25	32,653
Chatham,	68,200.00	29,500.00	.....	97,700.00	7.07	13,819
Total,	\$ 75,324,990.88	\$34,977,700.00	\$5,427,072.53	\$115,729,763.41	1452.90	\$79,654

* The total road owned by the D. & N. R. R. is 36.20 miles, only 30.25 miles of which are operated by this Company. The total mileage, however, has been used in the above table, and the grand total of miles operated will not, therefore, agree with other tables in this report.

Cost of Road, Equipment, and Permanent Improvements.

Item.	EXPENDITURES DURING YEAR.		Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost Per Mile.
	Included in Operating Expenses.	Not Included in Operating Expenses charged to Construction or Equipment.			
Construction:					
Right of Way,	.....	\$8,984.09	.....	.....	.....
Other Real Estate,	.....	641,500.71	.....	.....	.....
Fences,	.....	9,252.20	.....	.....	.....
Grading, Bridge and Culvert Masonry,	.....	2,092,320.46	.....	.....	.....
Bridges and Trestles,	.....	584,385.19	.....	.....	.....
Rails,	.....	175,051.34	.....	.....	.....
Ties,	.....	68,878.89	.....	.....	.....
Other Superstructure,	.....	50,731.09	.....	.....	.....
Buildings, Furniture and Fixtures,	\$73,233.30	348,991.56	.....	.....	.....
Engineering Expenses,	.....	51,109.64	.....	.....	.....
Wharfing, etc.,	.....	10,006.79	.....	.....	.....
Sidings and Yard Extensions,	62,206.33	.....	.....	.....	.....
Other items,	.....	11,622.43	.....	.....	.....
Total Construction,	\$135,444.63	\$1,052,834.39	\$35,549,319.73	\$39,602,154.12	\$140,259.09

Cost of Road, Equipment, and Permanent Improvements. — *Continued.*

Item.	EXPENDITURES DURING YEAR.				
	Included in Operating Expenses.	Not Included in Operating Expenses charged to Construction or Equipment.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost Per Mile.
Equipment:					
Locomotives,		\$76,984.70			
Passenger Cars,		15,138.00			
Sleeping, Parlor, and Dining Cars,	\$33,600.25	255,081.39			
Freight Cars,	87,421.59	36,050.00			
Floating Equipment,		9,025.00			
Total Cost Equipment,	\$121,021.84	\$392,279.09	\$5,111,514.86	\$5,503,793.95	\$19,492.81
Total Cost Construction, Equipment, etc.,	\$256,466.47	\$4,445,113.48	\$40,660,834.59	\$45,105,948.07	\$159,751.90

12,172 01 tons of new 100lb. steel rail have been laid on New York, Hartford, and Providence Divisions in substitution of 60 to 74lb. rail and charged to operating expenses. The excess of weight would approximate \$116,000.

Income Account.

Gross Earnings from Operation (p. 276),	\$25,576,884.60	
Less Operating Expenses (p. 280),	17,932,709.48	
Income from Operation,		\$7,644,175.12
Dividend on Stocks Leased, per schedule,	\$65,592.00	
Dividends on Stocks Owned (p. 277),	5,385.75	
Interest on Bonds Owned (p. 278),	34,840.00	
Miscellaneous Income, less Expenses (p. 278),	3,663.12	
Income from other sources,		109,480.87
Total Income,		\$7,753,655.99
Deductions from Income:		
Interest on Funded Debt accrued (p. 272),	\$202,000.00	
Interest on Interest-bearing Current Liabilities		
Accrued, not otherwise provided for,	109,003.72	
Rents paid for lease of road (p. 281),	3,379,974.95	
Taxes,	1,409,459.61	
Interest on Subscriptions to Convertible Debenture Certificates,	262,039.76	
Interest on Housatonic Certificates of Indebtedness and Rolling Stock Certificates,	17,500.00	
Total Deduction from Income,		5,379,978.04
Net Income,		\$2,373,677.95
Dividends, 10 per cent., common stock (p. 271),	\$3,631,292.50	
Total,		3,631,292.50
Deficit from Operations of Year ending June 30, 1894,		\$1,257,614.55
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],		\$6,109,916.16
		\$4,852,301.61

Income Account.—Continued.

† Additions for Year,	\$12,685.70	
§ Deductions for Year,	11,653.38	1,032.32
Surplus on June 30, 1894 [for entry on "General Balance Sheet," p. 282],		\$4,853,333.93

† Additions: Profit from sales of bonds owned,	\$8,035.65
Excess of receipts over expenses Union Wharf Co.,	4,650.05
Total Additions,	\$12,685.70
§ Deductions: Amt. of old claims and worthless acct. charged off,	\$11,653.38

DIVIDENDS ON STOCKS LEASED.

Old Colony Steamboat Company,	\$38,692.00
Providence, Warren, and Bristol Railroad Company,	16,855.00
Union Freight Railroad Company,	10,045.00
	\$65,592.00

Earnings from Operation.

Item.	Total Receipts.	Deductions, Account of Re- payments, etc.	Actual Earnings.
Passenger: Passenger Revenue,	\$13,087,908.73		
Less Repayments: Tickets redeemed,		\$59,869.27	
Excess Fares refunded,		56,382.90	
Total Deductions,		\$116,252.17	
Total Passenger Revenue,			\$12,971,656.56
Mail,			494,536.43
Express,			725,781.68
Extra Baggage and Storage,			107,157.65
Receipts from Parlor, Dining, Buffet, and Sleeping Cars, etc.,			559,196.31
Total Passenger Earnings,			\$14,858,328.63
Freight: Freight Revenue,	10,155,759.36		
Less Repayments: Overcharge to shippers,		64,677.03	
Total Deductions,		\$64,677.03	
Total Freight Revenue,			\$10,091,082.33
Other items: Hoisting, Trackage, etc.,			332,464.10
Total Freight Earnings,			\$10,423,546.43
Total Passenger and Freight Earnings,			\$25,281,875.06
Other Earnings from Operation: Rents not otherwise provided for,	295,009.54		
Total Other Earnings,			\$295,009.54
Total Gross Earnings from Operation,			\$25,576,884.60

Stocks Owned.

a. Railway Stocks:

Name.	Total Par Value.	Rate.	Income or Dividend Received.	Valuation.
Harlem Riv. & Portch'r R. R. Co.,	\$42,250 00	.....	.....	\$42,250 00
B. & N. Y. Air Line R. R. (Com.),	663,600 00	.....	.....	33,180 00
B. & N. Y. Air Line R. R. (Pref.),	1,000 00	4%	\$40 00	1,001 00
West Stockbridge R. R. Co.,	39,600 00	4 38%	1,730 00	29,888 00
Stockbridge & Pittsfield R. R. Co.,	9,500 00	6%	570 00	7,600 00
Naugatuck R. R. Co.,	2,700 00	15%	405 00	6,683 00
Shore Line Railway Co.,	1,200 00	5.62%	67.50	2,172 00
Housatonic R. R. Co. (Com.),	300 00	.....	.....	55.40
Housatonic R. R. Co. (Pref.),	92,500 00	1%	930 00	27,750 00
Danbury & Norwalk R. R. Co.,	125 00	9%	11.25	150 00
Old Colony R. R. Co.,	4,000 00	4.72%	189 00	22,331.78
New Haven & Northampton Co.,	1,100 00	3%	33 00	1,100 00
New Haven & Derby R. R. Co.,	1,200 00	3.37%	40.50	900 00
Wood River Branch R. R. Co.,	20,000 00	.....	.....	20,000 00
Narragansett Pier R. R. Co.,	18,700 00	3%	561 00	18,700 00
N. Y. Cen. & Hud. Riv. R. R. Co.,	10,000 00	5%	500 00	10,385 00
*Stockbridge & Pittsfield R. R. Co.,	.....	.....	90 00	.....
*Berkshire R. R. Co.,	.....	.....	52.50	.....
Total,	\$907,775 00	.....	\$5,219.75	\$224,146.18

* These amounts were received or accrued on account of dividends on stocks of leased lines either actually owned by the Company during a portion of the year or for which its stock was issued in exchange.

b. Other Stocks:

Name.	Total Par Value.	Rate.	Income or Dividend Received.	Valuation.
Prov. & Stonington S. S. Co.,	\$1,277,600	.....	.....	\$1,437,300 00
† N. Y., P. & B. & O. C. Ter'l Co.,	75,000	.....	.....	37,500 00
New York Transfer Co.,	4,000	4%	\$160 00	1,600 00
‡ Iron Works Aqueduct Company, Brookfield, Conn.,	.....	.....	6.00	.....
Total,	\$1,356,600	.....	\$166 00	\$1,476,400 00
Grand Total, a and b, . . .	\$2,264,375	.....	\$5,385.75	\$1,700,546.18

† Paid assessments of \$15 per share.

‡ This Company owns one-twelfth of the total stock of the Iron Works Aqueduct Company, which interest, however, is not entered in the Company's books.

In addition to the stocks listed on the preceding page the Company owns stocks of various lines for which its own stock has been issued, as per the attached schedule:

STOCKS OF LEASED LINES RECEIVED IN EXCHANGE FOR STOCK OF NEW YORK,
NEW HAVEN & HARTFORD RAILROAD COMPANY.

New Haven & Northampton Company, 24,035 shares for 9,614 shares of N. Y., N. H. & H.,	\$961,400.00
Boston & New York Air Line Railroad, 15,725 shares for 6,290 shares of N. Y., N. H. & H.,	629,000.00
Shore Line Railway, 8,068 shares for 6,051 shares of N. Y., N. H. & H.,	605,100.00
Naugatuck Railroad, 9,551 shares for 9,551 shares of N. Y., N. H. & H.,	955,100.00
Housatonic Railroad, 25,504 shares for 3,188 shares of N. Y., N. H. & H.,	318,800.00
Danbury & Norwalk Railroad, 8,928 shares for 2,232 shares of N. Y., N. H. & H.,	223,200.00
New Haven & Derby Railroad, 3,497 shares for 1,076 shares of N. Y., N. H. & H.,	107,600.00
Berkshire Railroad, 10 shares for 6 shares of N. Y., N. H. & H.,	600.00
Stockbridge & Pittsfield Railroad, 15 shares for 9 shares of N. Y., N. H. & H.,	900.00
Old Colony Railroad, 55,180 shares for 49,662 shares of N. Y., N. H. & H.,	4,966,200.00
87,679 shares of N. Y., N. H. & H.,	\$8,767,900.00

Bonds Owned.

Name.	Total Par Value.	Rate.	Income or Interest Received.	Valuation.
New Haven & Northampton Co.,	\$350,000.00	7%	\$17,500.00	\$348,612.50
Harlem Riv. & P'tchester R.R. Co.,	10,000.00	7%	700.00	13,300.00
Harlem Riv. & P'tchester R.R. Co.,	56,000.00	4%	2,240.00	56,572.17
Pawtuxet Valley R. R. Co.,	100,000.00	7%	7,000.00	100,000.00
* N. Y. & N. E. R. R. Co.,	.....	.....	6,525.00	
* New Haven & Derby R. R. Co.,	.....	.....	875.00	
Total,	\$516,000.00		\$34,840.00	\$518,484.67

* Sold during the year.

Miscellaneous Income.

Net Miscellaneous Income—Interest on deposits, etc., \$3,663.12

Operating Expenses.

Item.	Amount.
Maintenance of Way and Structures :	
Repairs of Roadway,	\$1,627,898.02
Renewals of Rails,	351,214.60
Renewals of Ties,	436,760.30
Repairs of Bridges and Culverts,	225,978.39
Repairs of Fences, Road-crossings, Signs, and Cattle Guards,	99,594.23
Repairs of Buildings,	342,477.54
Repairs of Docks and Wharves,	88,806.14
Total,	\$3,122,729.22
Maintenance of Equipment :	
Repairs and renewals of Locomotives,	586,204.94
Repairs and renewals of Passenger Cars,	664,157.26
Repairs and renewals of Freight Cars,	632,262.66
Repairs and renewals of Ferryboats, Tugs, Floats, and Barges,	102,519.22
Shop Machinery, Tools, etc.,	103,345.47
Other expenses,	56,412.79
Total,	\$2,144,902.34
Conducting Transportation :	
Wages of Enginemen, Firemen, and Roundhousemen,	1,282,132.80
Fuel for Locomotives,	1,970,207.13
Water-supply for Locomotives,	150,916.62
All other supplies for Locomotives,	138,270.61
Wages of other Trainmen,	2,012,921.70
All other train supplies,	465,500.08
Wages of Switchmen, Flagmen, and Watchmen,	721,278.69
Expenses of Telegraph, including Train Dispatchers and Operators,	230,679.00
Wages of Station Agents, Clerks, and Laborers,	2,846,965.07
Station supplies,	231,588.60
Car Mileage—Balance,	346,572.22
Loss and Damage,	77,682.34
Injuries to persons,	153,573.65
Barges, Floats, Tugs, Ferryboats, expenses of, including Wages, Fuel, and supplies,	314,771.94
Other Expenses,	509,603.02
Total,	\$11,452,663.47
General Expenses:	
Salaries of Officers,	\$225,323.68
Salaries of Clerks,	171,873.77
General Office Expenses and Supplies,	35,800.53
Advertising,	48,924.84
Insurance,	32,594.81
Expense of Traffic Associations,	782.11
Rents for Tracks, Yards, and Terminals,	281,926.41
Rents not otherwise provided for,	13,652.62
Legal Expenses,	192,722.53
Stationery and Printing,	156,487.13
Other General Expenses,	52,326.02
Total,	\$1,212,414.45

Operating Expenses.—Continued.

Item.	Amount.
Recapitulation of Expenses:	
Maintenance of Way and Structures,	\$3,122,729.22
Maintenance of Equipment,	2,144,902.34
Conducting Transportation,	11,452,663.47
General Expenses,	1,212,414.45
Grand Total,	\$17,932,709.48

Percentage of expenses to earnings,—entire line, 70.11.

Rentals.

Name of Road.	Total.	Less Dividends rec'd on Stocks exchanged for N.Y., N.H. & H. Stock.	Net Amount.
Harlem River & Portchester,	\$170,000.00		\$170,000.00
Naugatuck,	206,000.00	\$95,510.00	110,490.00
Boston & New York Air Line,	144,940.00	62,900.00	82,040.00
Colchester,	1,750.00		1,750.00
Shore Line Railway,	100,000.00	71,379.61	28,620.39
New Haven & Northampton,	321,800.00	72,105.00	249,695.00
Holyoke & Westfield,	26,611.19		26,611.19
Providence & Worcester,	446,000.00		446,000.00
Pawtuxet Valley,	17,663.00		17,663.00
Housatonic,	177,756.00	25,504.00	152,252.00
Berkshire,	36,250.00		36,250.00
West Stockbridge,	1,800.00		1,800.00
Stockbridge & Pittsfield,	27,172.00		27,172.00
New Haven & Derby,	87,944.50	10,491.00	77,453.50
Old Colony,	1,703,532.66	356,807.50	1,346,725.16
Boston & Providence,	494,800.00		494,800.00
Providence, Warren & Bristol,	24,061.89		24,061.89
Fall River,	15,889.93		15,889.93
Plymouth & Middleboro,	11,350.00		11,350.00
Attleboro Branch,	9,219.00		9,219.00
Nantasket Beach,	6,250.00		6,250.00
Chatham,	2,701.89		2,701.89
Danbury & Norwalk,	63,500.00	22,320.00	41,180.00
	\$4,096,992.06	\$717,017.11	\$3,379,974.95

Rentals Paid.*a.* Rents paid for lease of road :

Name of Road.	Interest on Bonds Guaranteed.	Dividends on Stock Guaranteed.	Cash.	Total. (See Schedule p. 280).
Harlem Riv. & Portchester,	\$170,000.00	.....	.....	\$170,000.00
Naugatuck,	6,000.00	\$104,490.00	.....	110,490.00
Boston & N. Y. Air Line,	25,000.00	57,040.00	.....	82,040.00
Colchester,	1,750.00	.....	.....	1,750.00
Shore Line, . . . . .	.....	.....	\$28,620.89	28,620.39
N. H. & Northampton, . .	233,000.00	1,695.00	15,000.00	249,695.00
Holyoke & Westfield, . .	11,600.00	.....	15,011.19	26,611.19
Providence & Worcester,	90,000.00	350,000.00	6,000.00	446,000.00
Pawtuxet Valley,	10,600.00	7,063.00	.....	17,663.00
Housatonic,	149,000.00	3,252.00	.....	152,252.00
Berkshire, . . . . .	.....	36,000.00	250.00	36,250.00
West Stockbridge, . . . .	.....	.....	1,800.00	1,800.00
Stockbridge & Pittsfield, .	.....	26,922.00	250.00	27,172.00
New Haven & Derby, . . .	74,534.50	2,919.00	.....	77,453.50
Danbury & Norwalk, . . .	33,500.00	7,680.00	.....	41,180.00
Old Colony,	650,540.90	630,455.00	65,729.26	1,346,725.16
Boston & Providence, . .	86,800.00	400,000.00	8,000.00	494,800.00
Prov., Warren & Bristol, .	.....	21,871.00	2,190.89	24,061.89
Fall River, . . . . .	.....	.....	15,889.93	15,889.93
Plymouth & Middleboro, .	11,250.00	.....	100.00	11,350.00
Attleborough Branch, . .	.....	9,219.00	.....	9,219.00
Nantasket Beach,	6,250.00	.....	.....	6,250.00
Chatham, . . . . .	.....	.....	2,701.89	2,701.89
Total Rents, <i>a.</i>	\$1,559,825.40	\$1,658,606.00	\$161,543.55	\$3,379,974.95

b. Rents paid for lease of tracks, yards, and terminals:

Designation of Property.	Situation of Property Leased.	Name of Company Owning Property Leased.	Total.
Tracks:	Between Conway Jct. and Shelburne Falls, Lowell,	Fitchburg.	\$7,500.00
“	“	B. & M. operating Boston & Lowell.	3,600.00
Yards:	Providence, R. I.,	City of Providence.	283.45
Land for Tracks,	Woonsocket, R. I.,	F. Harris <i>et al.</i>	200.00
“	Providence, R. I.,	City of Providence.	250.00
Terminals:			
Grand Cen. Station,	New York City,	N. Y. & Harlem R. R.	155,335.95
Docks, etc.,	Piers 36, 45, 49, 50, 51, and 52,	New York City <i>et al.</i>	75,609.45
Station,	Springfield, Mass.,	Boston & Albany R. R.	20,000.00
“	Willimantic, Conn.,	N. Y. & N. E. R. R.	2,400.00
“	Shelburne Falls, Mass.,	Fitchburg R. R.	2,500.00
“	Pittsfield, Mass.,	Boston & Albany R. R.	2,500.00
“	Worcester, Mass.,	“	8,000.00
Wharf Property,	Newport, R. I.,	Trustees Long Wharf,	1,400.00
Passenger Station,	Fitchburg, Mass.,	Fitchburg R. R.	2,347.56
Grand Total Rents, <i>b.</i>			\$281,926.41

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$35,549,319.73	Cost of Road (p. 275), \$	39,602,154.12	4,052,834.39	.....
5,111,514.86	Cost of Equipment (p. 275),	5,503,793.95	392,279.09	.....
1,648,807.00	Stocks owned (p. 277),	1,700,546.18	51,739.18	.....
815,152.77	Bonds owned (p. 278),	518,484.67	.....	296,668.10
	Stocks of Leased Lines (not merged) received in exchange for N. Y., N. H. & H. Stock,	8,767,900.00	5,004,900.00	.....
3,763,000.00	Cash & Cur. Assets (p. 273),	3,617,881.70	880,480.89	.....
2,737,400.81	Other Assets:			
1,372,223.45	Materials and Supplies,	2,139,991.95	767,768.50	.....
	Contingent Assets:			
88,275.91	N. Y., Prov. & Boston, & O. C. Terminal Co.,	208,156.43	119,880.52	.....
	Terminal Lands, Prov., R.I.	461,512.00	461,512.00	.....
16,313.53	Expenditures on Pawtuxet Valley R. R.,	16,313.53	.....	.....
24,530.17	Advances to Harlem River & Portchester R. R. Co.,	24,530.17	.....	.....
\$51,126,538.23	Grand Total,	\$ 62,561,264.70	11,434,726.47	.....

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$32,938,000.00	Capital Stock (p. 271),	\$ 37,942,900.00	5,004,900.00	.....
	Subscriptions to Con. Deb.			
3,281,900.00	Ctfs.,	9,850,775.00	6,568,875.00	.....
4,300,000.00	Funded Debt (p. 272),	4,300,000.00	.....	.....
3,894,955.34	Current Liabilities (p. 273),	4,870,518.25	975,562.91	.....
	Accrued Interest on Fund-			
63,629.54	ed Debt not yet payable,	127,395.63	63,766.09	.....
	Accrued Rentals not yet			
182,037.85	payable,	292,841.89	110,804.04	.....
	Deferred Liabilities:			
200,000.00	Rolling Stock Ctfs. Housa-	200,000.00	.....	.....
	tonic R. R., due 1899,			
50,000.00	Ctfs. of Indebtedness, Hou-	23,500.00	.....	26,500.00
	satic R. R., due 1894,			
50,000.00	do. do. 1895,	50,000.00	.....	.....
50,000.00	do. do. 1896,	50,000.00	.....	.....
	Deferred Income, being			
	commutation tickets not			
	usable until after July 1,			
6,099.34	1893,	.....	.....	6,099.34
6,109,916.16	Profit and Loss,	4,853,333.93	.....	1,256,582.23
\$51,126,538.23	Grand Total,	\$ 62,561,264.70	11,434,726.47	.....

Important Changes during the Year.

The improvements referred to in the last report, as outlined in the circular of the Directors, dated Dec. 10, 1892, have been carried on during the year.

On July 1, 1893, the Company commenced to operate the property of the Old Colony Railroad Company and its leased lines, under the lease to this Company, dated March 1, 1893.

No consolidations or reorganizations.

Stocks for the amount of \$5,004,900 was issued during the year in exchange for stocks of leased lines, as shown on page 17.

No bonds issued.

Contracts, Agreements, etc.

The Adams Express Company operates over the road of this Company, the compensation being based mainly on space occupied. Also contracts with New York & Boston Dispatch Express Company and with Earle & Prews Express Company for local service for proportion of receipts.

No contracts. Compensation fixed by the Post Office Department.

Sleeping, Parlor, and Buffet cars are operated over this road. This class of cars on through and local trains on this system are owned and operated by this Company.

Joint lines are operated in connection with the Boston & Albany Railroad of both Parlor and Sleeping cars, each road furnishing its quota, based on mileage.

Joint line of Parlor cars is operated in connection with the New York & New England Railroad, each road furnishing its quota of cars, based on mileage.

Pullman Sleepers and Parlor cars are operated between Boston and Harlem River, filling joint lines with the Pennsylvania Railroad between Boston, Philadelphia, and Washington.

Pullman cars are operated on the Old Colony system under contract.

Two Dining cars are operated between Boston and New London, owned and leased by this company.

This company has arrangements with its connections for the interchange of freight and passengers whereby it receives, in some cases, its local rates, and in other cases a proportion of the through rate based on the relative mileage. There also exists a contract (to which this Company is a party) between rail and water transportation lines between New York and Boston, which regulates rates of freight and passengers.

There is no written contract with the New York, New Haven & Hartford Railroad Company, but an arrangement with the Western Union Telegraph Company, whereby right of way is conceded to it in consideration of telegraph facilities furnished to the railroad. The New York, New Haven & Hartford Railroad Company succeeded to contracts between the Western Union Telegraph Company and the New York, Providence & Boston and Housatonic Railroad Companies which, in effect, are the same as above.

The Company has contracts with the New England Telephone & Telegraph Company and with the Southern New England Telephone Company for exchange service with the usual terms granted to railroad companies.

Security for Funded Debt.

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From —	To —	Miles.	
First Mort. New York, New Haven & Hartford R. R. Co.	Junction with the New York & Harlem R. R. at or near Williams Bridge, N. Y.	The northerly terminus of the N. Y., N. H. & H. R. R. in city of Springfield, Mass.	122.44	Total issue limited to \$5,000,000.00 Limit of issue. \$1,000,000.00
First Mort. N. Y., P. & B. R. R. Co.	Providence, R. I.	Stonington, Conn.	50.00	Limit of issue. \$300,000.00
First Mort. N. Y., P. & B. R. R. Co.	Stonington, Conn.	Groton, Conn.	12.50	Limit of issue. \$4,000,000.00
Gen'l Mort. N. Y., P. & B. R. R. Co.	Providence, R. I.	New London, Conn., including Thames River Bridge.	62.11	

Employees and Salaries.

Class.	Number.	Total No. of Days Worked.	Total Yearly Compensation.	Av. Daily Compensation.
General Officers,	18	5,577	\$108,523.73	\$19.46
Other Officers,	112	38,519	263,960.71	6.85
General Office Clerks,	661	205,058	453,377.30	2.21
Other Employees:				
Station Agents,	631	217,617	449,388.40	2.07
Other Station Men,	4,639	1,444,178	2,637,886.30	1.83
Enginemen,	698	217,483	837,357.90	3.85
Firemen,	690	216,234	452,021.70	2.09
Conductors,	542	168,369	559,059.35	3.32
Other Trainmen,	1,714	508,073	997,222.35	1.96
Machinists,	443	117,028	280,850.35	2.40
Carpenters,	871	216,375	489,780.10	2.26
Other Shopmen,	1,402	398,285	839,237.68	2.11
Section Foremen,	471	147,932	349,977.75	2.37
Other Trackmen,	3,394	894,472	1,338,890.55	1.50
Switchmen, Flagmen, and Watchmen,	1,322	455,741	685,950.25	1.51
Telegraph Operators and Dispatchers,	252	85,019	165,098.45	1.94
Employees — account Floating Equipm't,	247	82,905	140,106.95	1.69
All other Employees and Laborers, .	1,230	392,990	658,637.11	1.68
Total (including "General Officers"),	19,337	5,811,855	11,707,326.93	\$2.01
Less "General Officers,"	18	5,577	108,523.73	19.46
Total (excluding "General Officers"),	19,319	5,806,278	11,598,803.20	\$2.00
Distribution of above:				
General Administration,	388	117,944	352,095.31	2.99
Maintenance of Way and Structures, .	4,622	1,275,130	2,239,121.45	1.76
Maintenance of Equipment,	3,251	899,375	1,816,166.09	2.02
Conducting Transportation,	11,076	3,519,406	7,299,944.08	2.07
Total (including "General Officers"),	19,337	5,811,855	11,707,326.93	\$2.01
Less "General Officers,"	18	5,577	108,523.73	19.46
Total (excluding "General Officers"),	19,319	5,806,278	11,598,803.20	\$2.00

Passenger, Freight, and Train Mileage, entire Line.

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	44,448,324			
Number of passengers carried one mile,	725,250,069			
No. of pass. carried one mile per mile of road,	493,609.16			
Average distance carried,	16.32			
Total passenger revenue,		12,971,656	56	
Av. amount received from each passenger,			29	1.83
Average receipts per passenger per mile,			01	7.88
Total passenger earnings,		14,858,328	63	
Passenger earnings per mile of road,		10,112	66	
Passenger earnings per train mile,		1	48	7.21
Freight Traffic:				
No. of tons carried of frt. earning revenue,	8,717,879			
Number of tons carried one mile,	541,484,407			
No. of tons carried one mile per mile of road,	368,537.25			
Average distance haul of one ton,	62.11			
Total freight revenue,		10,091,082	33	
Av. amount received for each ton of freight,			1	15 7.52
Average receipts per ton per mile,			01	8.64
Total freight earnings,		10,423,546	43	
*Freight earnings per mile of road,		7,094	32	
Freight earnings per train mile,		2	21	
Passenger and Freight:				
Passenger and freight revenue,		23,062,738	89	
Pass. and freight revenue per mile of road,		15,696	63	
Passenger and freight earnings,		25,281,875	06	
Pass. and freight earnings per mile of road,		17,206	98	
Gross earnings from operation,		25,576,884	60	
Gross earnings from operation per m. of road,		17,407	77	
Gross earnings from operation per train mile,		1	73	9.07
Operating expenses,		17,932,709	48	
Operating expenses per mile of road,		12,205	10	
Operating expenses per train mile,		1	21	9.31
Income from operation,		7,644,175	12	
Income from operation per mile of road,		5,202	67	
Train Mileage:				
Miles run by passenger trains,	9,951,315			
Miles run by freight trains,	4,598,293			
Miles run by mixed trains,	157,643			
Total Mileage Trains Earning Revenue,	14,707,251			
Miles run by switching trains,	3,744,248			
Miles run by construction and other trains,	581,380			
Grand Total Train Mileage,	19,032,879			
Mileage of loaded freight cars — North or East,	37,101,478			
Mileage of loaded freight cars — South or West,	28,168,204			
Mileage of empty freight cars — North or East,	7,013,746			
Mileage of empty freight cars — South or West,	14,655,583			
Average number of freight cars in train,	18.43			
Average number of loaded cars in train,	13.84			
Average number of empty cars in train,	4.59			
Average number of tons of freight in train,	114.81			
Av. No. of tons of freight in each loaded car,	8.30			

* To compute "Freight earnings per mile of road" on total mileage operated is manifestly incorrect, in connection with the fact that on 12.03 miles of the mileage operated (that between Woodlawn Junction and Grand Central Depot, New York), no freight is moved, that part of the road being used exclusively for passenger traffic. However, conforming to the wishes of the Interstate Commerce Commission, the total mileage operated has been used as the basis for all the "per mile of road" calculations.

Freight Traffic Movement.

Commodity.	Freight Originating on this Road.	Freight Received from Con- necting Roads and other Carriers.	TOTAL FREIGHT TONNAGE.	
	Whole Tons.	Whole Tons.	Whole Tons.	Per Ct.
Products of Agriculture:				
Grain,	18,208	76,072	94,280	1.08
Flour,	63,912	266,097	330,009	3.79
Other Mill Products,	38,664	76,459	115,123	1.32
Hay,	37,864	144,142	182,006	2.08
Tobacco,	2,827	790	3,617	0.04
Cotton,	39,668	73,908	113,576	1.30
Fruit and Vegetables,	35,400	75,820	111,220	1.28
Products of Animals:				
Live Stock,	20,181	42,964	63,145	0.72
Dressed Meats,	17,139	82,451	99,590	1.14
Other Packing-House Products,	7,005	4,163	11,168	0.13
Poultry, Game, and Fish,	24,050	2,373	26,423	0.30
Wool,	7,690	8,241	15,931	0.18
Hides and Leather,	5,761	17,993	23,754	0.27
Products of Mines:				
Anthracite Coal,	509,474	203,272	712,746	8.18
Bituminous Coal,	845,151	108,547	953,698	10.94
Coke,	1,794	23,665	25,459	0.30
Ores,	9,795	7,280	17,075	0.20
Stone, Sand, and other like articles,	225,398	35,608	261,006	3.00
Products of Forest:				
Lumber,	189,639	317,474	507,113	5.82
Manufactures:				
Petroleum and other oils,	76,900	28,181	105,081	1.20
Sugar,	14,063	1,165	15,228	0.18
Iron, Pig and Bloom,	67,268	49,578	116,846	1.34
Iron and Steel Rails,	5,349	14,921	20,270	0.23
Other Castings and Machinery,	69,960	38,599	108,559	1.24
Bar and Sheet Metal,	52,140	50,922	103,062	1.18
Cement, Brick, and Lime,	205,682	40,569	246,251	2.83
Agricultural Implements,	1,803	259	2,062	0.02
Wagons, Carriages, Tools, etc.,	8,012	2,297	10,309	0.12
Wines, Liquors, and Beers,	32,963	40,123	73,086	0.84
Household Goods and Furniture,	19,484	8,155	27,639	0.32
Merchandise:	1,058,784	813,745	1,872,529	21.48
Miscellaneous:				
Other commodities not mentioned above,	1,218,551	1,131,467	2,350,018	26.95
Total Tonnage—Entire Line,	4,930,579	3,787,300	8,717,879	10.00

Description of Equipment.

Item.	No. added during Year.	Total No. at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
			No.	Name.	No.	Name.
Locomotives—Owned and Leased:						
Passenger,	3	380	380	Westinghouse & Eames.	95	Miller.
Freight,	2	172	160	"	.....
Switching,	1	117	30	"	.....
Total Locomotives in Service,	6	669	570	.....	95	
Total Locomotives Owned,	6	669	570	.....	95	
Cars—Owned and Leased:						
In Passenger Service—				Westinghouse		
First-class Cars,		919	919	& Eames.	919	Mil. & Jan.
Second-class Cars,		150	150	Westinghouse.	150	" "
Combination Cars,		206	206	West. & Eames.	206	" "
Dining Cars,		2	2	Westinghouse.	2	" "
Parlor Cars,	8	95	95	"	95	" "
Sleeping Cars,	12	35	35	"	35	" "
Baggage, Express, and Postal Cars,		217	217	"	217	" "
Other Cars in Passenger service,		1	1	"	1	" "
Total,	20	1625	1625	.....	1625	
In Freight Service—						
Box Cars,		4765	991	.....	1911	} M. C. B. Couplers.
Flat Cars,		1509	106	.....	418	
Stock Cars,		27	.....	.....	4	
Coal Cars,	100	2503	292	.....	712	
Tank Cars,		1	.....	.....	.....
Other Cars,		2805	.....	.....	.....
Total,	100	11610	1389	.....	3045	
In Company's Service—						
Officers' and Pay Cars,		10	10	Westinghouse.	10	M. C. B.
Derrick Cars,		30	7	"	.....	Couplers.
Caboose Cars,	30	204	.....	.....	5	"
Other Road Cars,		95	2	.....	1	"
Total Cars in Service,	30	339	19	.....	16	
Total Cars Owned,	150	13574	3033	.....	4686	

Mileage.—State of Connecticut.**a. MILEAGE OF ROAD OPERATED.**

Line in Use.	LINE REPRESENTED BY CAPITAL STOCK.		Line Operated under Lease.	Line Operated under Trackage Rights.	Total Mileage Operated.	RAILS. (Excluding Trackage Rights.)	
	Main Line.	Branches & Spurs.				Iron.	Steel.
Miles of single track, . . .	102.45	97.79	367.02	.36	567.62	....	567.26
Miles of second track, . . .	102.45	19.16	51.36	....	172.97	....	172.97
Miles of third track, . . .	14.56	.....	.....	....	14.56	....	14.56
Miles of fourth track, . . .	14.56	.....	.....	....	14.56	....	14.56
Miles of yard track and sid- ings,	94.33	31.90	110.68	....	236.91	46.53	190.38
Total Mileage Operated (all tracks),	328.35	148.85	529.06	.36	1,006.62	46.53	959.73

b. MILEAGE OF LINE OPERATED BY STATES AND TERRITORIES.

State of Connecticut.	LINE REPRESENTED BY CAPITAL STOCK.		Line Operated under Lease.	Line Operated under Trackage Rights.	Total Mileage Operated.	Steel Rails.
	Main Line.	Branches and Spurs.				
	102.45	97.79	367.02	.36	567.62	567.26
Total Mileage Oper- ated (single track),	102.45	97.79	367.02	.36	567.62	567.26

c. MILEAGE OF LINE OWNED BY STATES AND TERRITORIES.

State of Connecticut.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	Steel Rails.
	Main Line.	Branches and Spurs.		
	102.45	97.79	200.24	200.24
Total Mileage Owned (single track), . . .	102.45	97.79	200.24	200.24

Mileage.—Entire Line.

a. MILEAGE OF ROAD OPERATED.

Line in Use.	LINE REPRESENTED BY CAPITAL STOCK.		Line of Proprietary Companies.	Line Operated under Lease.	Line Operated under Contract, etc.	Line Operated under Trackage Rights.	Total Mileage Operated.	New Line Constructed during Year.	RAILS. (Excluding Trackage Rights.)	
	Main Line.	Branches and spurs.							Iron.	Steel.
Miles of single track.	122.44	159.91	14.14	1,120.82	29.64	22.33	1,469.28	.....	.....	1,446.95
Miles of second track.	122.44	62.66	11.50	307.53	.....	14.73	518.86	.....	.....	504.13
Miles of third track.	24.38	.....	.....	14.91	.....	12.03	51.32	2.90	.....	39.29
Miles of fourth track.	24.38	.....	.....	4.83	.....	12.03	41.24	2.90	.....	29.21
Miles of yard track and sidings.	108.82	51.42	27.87	471.20	14.86	.....	674.17	.....	205.64	468.53
Total Mileage operated (all tracks).	402.46	273.99	53.51	1,919.29	44.50	61.12	2,754.87	.....	205.64	2,488.11

b. MILEAGE OF LINE OPERATED BY STATES AND TERRITORIES.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Line of Proprietary Companies.	Line Operated under Lease.	Line Operated under Contract, etc.	Line Operated under Trackage Rights.	Total Mileage Operated.	RAILS.	
	Main Line.	Branches and spurs.						Iron.	Steel.
Connecticut.	102.45	97.79	.....	367.02	.....	.36	567.62	.36	567.26
Massachusetts.	5.95	.....	2.64	685.81	29.64	9.94	733.98	9.94	724.04
New York.	14.04	.....	11.50	.....	.....	12.03	37.57	12.03	25.54
Rhode Island.	.....	62.12	.....	67.99	.....	.....	130.11	.....	130.11
Total Mileage operated (single track).	122.44	159.91	14.14	1,120.82	29.64	22.33	1,469.28	22.33	1,446.95

c. MILEAGE OF LINE OWNED BY STATES AND TERRITORIES.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	RAILS.	
	Main Line.	Branches and spurs.		Iron.	Steel.
Connecticut.	102.45	97.79	200.24	.....	200.24
Massachusetts.	5.95	.....	5.95	.....	5.95
New York.	14.04	.....	14.04	.....	14.04
Rhode Island.	.....	62.12	62.12	.....	62.12
Total Mileage owned (single track).	122.44	159.91	282.35	.....	282.35

Renewals of Rails and Ties.

NEW RAILS LAID DURING YEAR.

Kind.	Tons.	Weight per Yard.	Average price per ton at distributing point.
Steel,	12,172.01	100 lbs.	\$27.23
"	25.34	88 "	43.14
"	4,417.88	78 "	24.32
"	3,635.36	74 "	25.81
"	3.72	73½ "	32.00
"	2.00	73 "	30.75
"	2.87	72 "	34.60
"	3,389.41	70 "	21.43
"	36.61	68 "	28.60
"	161.78	67 "	28.45
"	9.67	56 "	26.32
Total,	23,856.65		\$25.68

NEW TIES LAID DURING YEAR.

Kind.	Number.	Average price at distributing point.
No. 1,	815,497	40.5 cts.
No. 2,	110,001	20.7 "
Total,	925,498	30.6 cts.

Consumption of Fuel by Locomotives.

Locomotives.	COAL—TONS.		WOOD—CORDS.		Total Fuel Consumed—Tons	Miles Run.	Average pounds consumed per Mile.
	Anthracite.	Bituminous.	Hard.	Soft.			
Passenger,	34,560	305,788	156	669	340,786	10,060,001	67.75
Freight,	622	208,113	68	190	208,875	4,858,455	85.98
Switching,	766	85,337	55	136	86,218	3,744,248	46.05
Construction,		13,625	2	12	13,632	535,199	50.94
Pay,		2,049		1	2,050	87,786	46.70
Total,	35,958	614,912	281	1,008	651,561	19,285,689	67.57

Average cost at distributing point: Anthracite Coal, \$3.72; Bituminous Coal, \$2.88; Soft Wood, \$2.11.

Accidents to Persons—State of Connecticut.

EMPLOYEES.

Kind of Accident.	TRAINMEN.		SWITCHMEN, FLAGMEN, AND WATCHMEN.		OTHER EMPLOYEES.		TOTAL.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Coupling and Uncoupling, Falling from Trains and Engines,	1	28	..	9	..	1	1	38
Overhead Obstructions, .	..	7	..	2	..	..	..	9
Collisions, . . . .	..	2	..	..	..	..	..	2
Derailments, . . . .	..	3	..	..	..	..	..	3
At Stations, . . . .	..	..	..	1	1	2	1	3
Other Causes, . . . .	..	4	..	1	3	11	3	16
Total,	7	58	2	17	5	16	14	91

OTHERS.

Kind of Accident.	PASSENGERS.		TRESPASSING.		NOT TRESPASSING.		TOTAL.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
At Highway Crossings, .	..	..	2	3	5	9	7	12
At Stations,	1	1	2	6	..	..	2	6
Other Causes, . . . .	..	4	27	23	..	4	27	27
Walking Track, . . . .	..	..	53	14	..	..	53	14
Total,	1	5	84	46	5	13	89	59

BRIEF DESCRIPTION OF ACCIDENTS UNDER "OTHER CAUSES," STATE OF CONNECTICUT.

"OTHER CAUSES."

Trainmen—Injured, 4.

July 28, 1893. F. P. Raymond, brakeman, foot injured while attempting to get on his train after train had started from Shelton, Conn.

December 29, 1893. Frank Morgan, brakeman, while on side of car, was struck by car standing on siding at Waterbury.

April 28, 1894. John Flynn, engineer, had finger crushed in gear of derrick car while at work on bridge near Arnold's station.

June 16, 1894. John Perry, engineer, in passing through round-house yard at New London, was struck by an engine. Feet crushed.

Switchmen, Flagmen, and Watchmen—Injured, 1.

April 17, 1894. John Donahue, switchman, was struck by passenger train while crossing yard tracks at New Haven, and injured internally.

Other Employees—Killed, 3.

August 10, 1893. John Murray, bridge carpenter, struck and instantly killed by train while working on track at Stratford.

January 31, 1894. Thomas Josef, a section man, was found on pilot of engine on extra freight train, fatally injured. Not seen on track by engineer or fireman.

March 23, 1894. Antonio Antinozi, laborer in extra gang, was struck by work train while working on track at West Haven and both legs cut off. Died from injuries.

Other Employees—Injured, 11.

August 4, 1893. Michael Higgins, section man on New Britain Branch, caught his foot between coupling-pin and end of car, crushing foot.

August 8, 1893. John Denker, freight handler, hand crushed while handling freight. Waterbury.

September 19, 1893. Raffael Roberto, laborer in extra gang, had top of middle finger, left hand, cut off by getting same caught between rail and top of car while unloading rail at Woodmont.

December 23, 1893. Timothy Young, section foreman, struck by train one-half mile east of Newfield, and seriously injured.

January 11, 1894. Italian, No. 265, laborer, had big toe of left foot crushed by lump of frozen earth falling on it from steam shovel, at Milford.

January 31, 1894. Patrick Sullivan, section man, struck by engine and injured about the head.

February 10, 1894. Dominick Carousa, laborer in extra gang, had left arm broken in two places by getting same caught between rope and winch head on steam shovel at Milford.

March 23, 1894. James Summons, laborer, foot cut with axe while cutting wood at Waterbury.

March 27, 1894. Frank Laerby, painter in shops, struck by switch engine while crossing yard tracks at New Haven, face cut, one rib and finger broken.

April 13, 1894. Laborer No. 614 had left hand badly lacerated by getting same caught between rail and top of car while unloading rail at West Haven.

May 18, 1894. S. O. Downs, foreman, acid in eye. Waterbury.

Passengers—Injured, 4.

September 9, 1893. Frederick Heacock, passenger, jumped from train near "Satan's Kingdom" on the New Hartford Branch.

October 3, 1893. Edward Verville of Collinsville, Conn., claims he was robbed on train, and thrown from train just south of Windsor Locks. Badly injured by some cause.

December 25, 1893. Patrick Cook jumped from moving passenger train at South Norwalk, receiving slight scalp wound.

June 19, 1894. A. Floriane, passenger, either jumped or fell from train near Thomaston.

Trespassing—Killed, 27.

July 15, 1893. Body of James Wynn, trespasser, found near track, Hamden.

July 26, 1893. Christian Berg was struck and killed by train at Branford Piling, while sitting on track.

July 28, 1893. William Foran, a boy, was struck and killed by engine at Berlin near Denis's brick-yard.

August 3, 1893. A tramp, name unknown, stealing a ride on freight train, fell from train at Meriden, run over and killed.

August 9, 1893. James Conroy threw himself under wheels of moving train at Stamford and was killed.

August 13, 1893. The body of an unknown man was found side of tracks at New Haven after train passed.

August 19, 1893. Alexander J. Wallace struck and killed by train while crossing yard tracks at New Haven.

October 8, 1893. Charles Knoplouck, trespassing, deaf and demented, struck by train and killed half-mile south of Brookfield Junction, Conn.

October 12, 1893. John Hines caught and killed between intermediate fence at Fairfield and train on which he was stealing a ride.

October 16, 1893. Alfred Grunach threw himself in front of train near Morgan street crossing, Hartford, and instantly killed.

October 16, 1893. Timothy Flynn struck and killed by train at East Bridgeport. Fell in fit on track.

November 11, 1893. John Mackey was found dead beside track half-mile north of Canaan, Conn.

November 20, 1893. William Meaney, trespasser, killed by extra freight, Henry street, New Haven.

November 22, 1893. Stephen Donovan was found dead on trestle between Derby Junction and Birmingham; intoxicated when last seen alive.

November 28, 1893. Joseph Welch, stealing a ride, fell from car and was run over and instantly killed in Silver street yard, New Haven.

December 24, 1893. Body of John Marston was found side of track at Leete's Island, Conn., supposed to have been killed by train.

January 25, 1894. Julia Ford, trespassing, killed. Ansonia, Conn.

February 2, 1894. Frank McCone, killed; under the influence of liquor and lying on the track. Not seen in time to stop. Near Cornwall Bridge, Conn.

February 9, 1894. Maggie Houliban, killed. Got out of sick bed, walked on track and laid down on track. Hawleyville, Conn.

February 20, 1894. Body of William Landigran was found side of track near Redfield's Quarry; there was some doubt as to how the man was killed.

February 21, 1894. Wm. H. Pierce, killed. Was lying across tracks, but was not seen in time to stop the train. One mile south of Canaan, Conn.

March 3, 1894. The body of a man, name unknown, found on east track, just south of Sigourney street crossing, Hartford, soon after train 204 passed. Supposed to be a tramp stealing a ride, and fell from train.

March 24, 1894. Body of unknown man found beside track half way between Botsford and Stepney, Conn.

May 1, 1894. James Burns attempted to board moving freight train at Ansonia. Fell under the wheels and was killed.

May 6, 1894. Body of William Labost found on track at Bridgeport; thought to have committed suicide by throwing himself under the wheels.

May 30, 1894. Frank Cook, two years old, struck and killed by train between brick yards 3 and 4. The child was playing on the track, dressed in light clothes, got up as train approached, started off track, turned back and remained between rails.

June 4, 1894. Jusay Bathogue struck and killed by train while crossing tracks at Bridgeport.

Trespassers—Injured, 23.

July 9, 1893. Edward Stoddoterstrom, stealing a ride, claims to have jumped from a freight train at Orange, Conn., and sustained several cuts and bruises.

July 20, 1893. Arananag Kenshkernian, trespasser, jumped from rear of tender of engine No. 64, at Flower street, Hartford; injured about the head and otherwise.

July 29, 1893. John Mooney was struck and seriously injured by train in the New Haven "Cut" while trying to jump on east-bound freight train.

July 31, 1893. Matthew Maloney, found between tracks near bridge south of Main street, Meriden, with broken shoulder. Evidently struck by passing train.

August 13, 1893. George Smith got foot caught and crushed between dead wood of cars while stealing a ride at South Norwalk.

September 5, 1893. Peter Gillooley attempted to get on switch train at stone quarry track, Meriden, fell to the ground and wheels ran over right foot, rendering amputation of part of foot necessary.

September 9, 1893. Toney Frank, trespasser, toes of both feet cut off by train at Southington.

September 17, 1893. Charles O'Neil, 16 years old, stealing a ride on extra freight train going east, fell from train, wheels ran over his ankle, rendering amputation necessary. Occurred at Wallingford.

November 22, 1893. John Palkenety, while lying side of track near Colchester, was struck by engine on the Colchester Branch, receiving slight cuts in the head.

November 30, 1893. John J. Connor fell while attempting to board train to steal ride at South Norwalk, was run over; left foot and head cut.

December 18, 1893. W. H. Edwards, struck by cars while crossing track at New Haven. Left leg and right toes crushed.

December 26, 1893. Patrick McLaughlin attempted to get on train at Wallingford, on crossing south of station, after train had started, fell under train and both legs cut off.

January 24, 1894. William Gleason fell under wheels and had right foot cut off while attempting to jump from train on which he was stealing ride at Stamford.

January 31, 1894. John Tierney stepped in front of train at New London and had left ankle crushed.

February 1, 1894. Hartwell Duncklee, trespasser, found injured near Prospect street bridge, New Haven.

February 24, 1894. G. H. Gregory, a passenger in street car, and Fred Birmingham, motorman, injured, account of collision on Chestnut street crossing, New Britain, between engine and motor car. Cause, failure on part of motorman to stop car before it ran on crossing.

March 19, 1894. Michael Karabia, shaken up and injured internally by jumping from moving passenger train on which he was stealing ride at South Norwalk.

March 27, 1894. Michael Kennedy, stealing ride, was knocked from the side of car by rock cut, severe cut in back of head. Two miles south of Derby Junction, Conn.

May 15, 1894. Anthony Welch, driving over a private crossing, was knocked out of wagon and slightly injured. Did not look for train. Bridgeport.

May 23, 1894. James Conners, attempted to climb over yard shifting train at Waterbury. Leg injured.

June 11, 1894. Jerry Mannix of New Haven attempted to get on ballast train, at Main street crossing, Meriden, fell under train, wheels passing over both legs, rendering amputation necessary.

April 5, 1894. Henry Quin of Providence, R. I., attempted to get on moving train No. 225, at Canton street crossing, Hartford, came in contact with switch stand, was knocked from car, one hand went on rail, and wheel of car smashed his fingers, rendering amputation necessary. Trying to get on train for purpose of stealing a ride.

Not Trespassing—Injured, 4.

July 25, 1893. Edward Phelps of Windsor, Conn., jumped from train at Cedar Hill and received severe scalp wounds.

September 2, 1893. Edward Varney jumped from train at Guilford, and was stunned, and received slight scalp wounds.

January 2, 1894. Jerry Condon fell under wheels and right foot crushed while attempting to board moving passenger train at Cos Cob.

June 13, 1894. George Richardson, left arm cut off and scalp wounded at Bridgeport by being struck by train while crossing track.

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.	Miles.	ALIGNMENT.			Length of Level Line.	ASCENDING GRADES.				DESCENDING GRADES.			
		Number of Curves.	Aggregate Length of Curved Line, Miles.	Length of Straight Line, Miles.		No.	Sum of Ascents, Feet.	Aggregate length of Ascending Grades, Miles.	No.	Sum of Descents, Feet.	Aggregate length of Descending Grades, Miles.		
N. York, N. Haven & Hartford, . . .	282.35	407	94.55	187.80	61.57	161	2,740	113.04	158	2,232	107.74		
Harlem River & Portchester, . . .	11.50	18	3.47	8.03	4.49	13	145	4.74	6	74	2.27		
Danbury & Norwalk, . . .	30.25	89	12.47	17.78	4.00	16	624	8.97	8	413	17.28		
Naugatuck, . . .	60.99	252	34.39	26.60	9.09	69	1,148	40.34	45	236	11.56		
New Haven & Derby, . . .	16.69	38	6.83	9.86	4.66	13	418	6.13	9	242	5.90		
Boston & New York Air Line, . . .	51.50	85	20.11	31.39	4.59	19	1,178	26.61	16	956	20.30		
Colchester, . . .	8.59	8	1.02	2.57	.74	4	44	.95	5	85	1.90		
Shore Line Railway, . . .	48.53	65	19.00	29.53	8.83	41	518	18.96	38	592	20.74		
New Haven & Northampton Co., . .	126.31	244	37.21	89.10	37.69	80	1,720	57.03	60	983	31.60		
Holyoke & Westfield, . . .	10.32	15	2.05	8.27	3.14	5	190	3.63	2	225	3.55		
Pawtuxet Valley, . . .	5.67	25	3.14	2.53	.39	24	200	3.95	14	52	1.33		
Providence & Worcester, . . .	50.40	107	19.47	30.93	10.23	25	568	30.68	8	67	9.49		
Hous., Berk., W. S'bgc, S'bgc & Pitts.	135.31	376	65.04	70.27	15.90	15	1,907	89.19	13	550	30.22		
Old Colony, . . .	495.20	633	141.58	353.62									
Boston & Providence, . . .	63.69	61	13.23	50.46									
Fall River, . . .	12.25	8	2.78	9.47									
Attleboro Branch, . . .	4.00	8	1.52	2.48									
Providence, Warren & Bristol, . .	14.35	18	4.78	9.57									
Nantasket Beach, . . .	6.95	26	3.05	9.90									
Plymouth & Middleboro, . . .	15.03	19	3.59	11.44									
Chatham, . . .	7.07	15	1.98	5.09									
No information.													
Total, . . .	1,451.95	2,517	491.26	960.69									

Characteristics of Road.—*Continued.*

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:—							
Stone, .	95	2,341	..	8	..	385	..
Iron, .	256	24,187	3	10	..	1,543	..
Wooden, .	112	6,343	10	8	..	1,314	..
Total, .	463	32,872	1	..	..	....	..
Trestles, .	75	34,030	..	26	..	6,694	..
Tunnels, .	1	250	..	..	..	....	..

HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:			
Bridges,	137	14	1
Conduits,	2	14	3
Total,	139	..	..
Overhead Railway Crossings:			
Bridges,	5	14	4
Conduits,	1	15	..
Total,	6	..	..
Tunnels,	1	14	2

GAUGE OF TRACK—4 feet, 8½ inches; 282.35 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Name of Owner.	Name of Operating Company.
282.35 46.20	Western Union Telegraph Co. Conn. River Telegraph Co.	Western Union Telegraph Co. Conn. River Telegraph Co.

Car Mileage.

Individuals, Co-operative Fast Freight Lines, and Stock Companies, to which the Company making this Report pays Mileage for the use of Cars.

American Cotton Oil Co.	Emery Manufacturing Co.
American Refrigerator Transit Co.	Fairchild Chemical Co.
Arms Palace Horse Car Co.	Fairbank, N. H. & Co.
Armour Packing Co.	Genesee Oil Works.
Armour & Co.	Grossman Palace Horse Car Co.
Atlanta Stone, Coal & Lumber Line.	Hammond Refrigerator Line.
Arnold Refrigerator Car Co.	Havens, C. B. & Co.
Anglo-American Refrigerator Car Co.	Hicks Stock Car Co.
Benton Stock Car Co.	Holmes & Adams.
Brill, J. G. & Co.	Illinois Steel Co.
Beadleston & Woerz.	Independent Refining Co.
Boston Live Stock Express.	Interstate Coal Supply Co.
Banner Refrigerator Line.	Iron Car Express Coal Line.
Bosshardt & Wilson.	John Schwartz & Co.
Boston Bridge Works.	J. E. B. Furniture Line.
Boyd, Lunham & Co.	Jacob Dold Packing Co.
Cudahy Refrigerator Line.	Kansas City Refrigerator Car Co.
Central Equipment Co.	Keystone Palace Horse Car Co.
Century Oil Co.	Lipton's Refrigerator Line.
California Fruit Transportation Co.	Loyal Hanna Coal & Coke Co.
Cottolene Refrigerator Line.	Libby, McNeil & Libby.
Canada Cattle Car Co.	Laurel Hill Car & Coal Co.
Cygnat Tank Line.	Lincoln Manufacturing Co.
Cudahy Milwaukee Refrigerator Line.	Live Poultry Transportation Co.
Cold Blast Transportation Co.	Morris Refrigerator Line.
Continental Fruit Express.	Merchants Despatch Transportation Co.
Climax Gasolene Co.	Manhattan Tank Line.
Chicago, New York & Boston Transportation Co.	Mather Horse Car Co.
Cornplanter Refining Co.	Metzar's Linseed Oil Co.
Comstock & Co.	Moran Refrigerator Line.
Crystal Oil Works.	Manhattan Oil Line Co.
Eureka Transportation Co.	National Oil Co.
Empire Oil Works.	New York Despatch Refrigerator Line.

Car Mileage.—*Continued.*

Narragansett Brewing Co.	Shipman, O. W. & Co.
National Linseed Oil Co.	Southern Despatch Lumber Line.
Northwest Despatch Fast Freight Line.	Southeastern Line.
Nichols Chemical Co.	Sun Oil Line.
New England Car Co.	St. Charles Car Co.
Pittsburgh Plate Glass Co.	Swift Refrigerator Line.
Pennsylvania Refining Co.	Titusville Oil Works.
Peavey Grain Line.	Tracey & Wilson.
Produce Dealers Despatch.	Terre Haute Brewing Co.
Producers Oil Co.	Tide Water Oil Co.
Peoria Matting Co.	Union Tank Line.
Peerless Tank Line.	Union Refrigerator Transit Co.
Piper, W. H. & Co.	Vanna, Chup & Co.
Rhode Island Locomotive Works.	Virginia & Alabama Coal Co.
Russell Paper Co.	Westmoreland Coal Co.
St. Louis Refrigerator Car Co.	W. P. Rend.
Southern Iron Car Line.	White Star Transportation Co.
Sioux City Dressed Beef Line.	Western Rolling Stock & Equipment
Street's Stable Car Line.	Co.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, John M. Hall, Vice-President, and H. M. Kochersperger, Comptroller of the New York, New Haven & Hartford Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

JOHN M. HALL,
Vice-President.

H. M. KOCHERSPERGER,
Comptroller.

Subscribed and sworn to before me this 18th day of September, 1894.

AVERY CLARK,
Notary Public.

NORWICH & WORCESTER RAILROAD CO.

History.

Name of common carrier making this report: Norwich & Worcester Railroad Company.

Date of organization: June 22, 1836.

Under laws of what Government, State, or Territory organized? Massachusetts and Connecticut.

What carrier operates the road of this company? The New York & New England Railroad Company.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
EDWARD L. DAVIS,	Worcester, Mass.,	Second Wed. in Jan., 1895.
THOMAS B. EATON,	" "	" " "
JOSIAH H. CLARKE,	" "	" " "
GEORGE H. BALL,	Boston, "	" " "
FRANCIS H. DEWEY,	Worcester, "	" " "
A. GEORGE BULLOCK,	" "	" " "
CHARLES P. COGSWELL,	Norwich, Conn.,	" " "
WILLIAM T. HART,	Boston, Mass.,	" " "
EDWARD C. THAYER,	Keene, N. H.,	" " "

Total number of stockholders at date of last election. 881.

Date of last meeting of stockholders for election of directors. Jan. 10, 1894.

Post-office address of general office, Norwich, Conn.

Post-office address of operating office, Boston, Mass.

Name and address of officer to whom correspondence regarding this report should be addressed: M. M. WHITEMORE, Treasurer, Norwich, Conn.

Officers.

Title.	Name.	Location of Office.
President,	GEORGE H. BALL,	40 State Street, Boston, Mass.
Secretary,	M. M. WHITEMORE,	Norwich, Conn.
Treasurer,	M. M. WHITEMORE,	Norwich, Conn.

Property Leased, or Otherwise Assigned for Operation.

Name of Railroad, the income of which from lease, or from other assignment for operation, is included in the Income Account — (p. 303):

NAME.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Norwich & Worcester,	Allyn's Point	Worcester.	N. Y. & N. E.	99 yrs. Lease.	66 16
Total Mileage,					66.16

Contract Existing between this Road and the Company by which it is Operated.

The Norwich & Worcester Railroad Company leased its property to the Boston, Hartford & Erie Railroad Company or its successors, now the New York & New England Railroad Company, under a ninety-nine years' lease, dating February 9, 1869, the lessee to pay all expenses of operating, interest on bonds, and 8 per cent. dividends on the preferred stock.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	66	\$100.00	\$6,600.00	\$6,600.00	.....	.....
Preferred,	38,250	100.00	3,825,000.00	2,769,200.00	8 per ct.	\$221,392
Total,	38,316	.....	\$3,831,600.00	2,775,800.00	.....	\$221,392

Manner of Payment for Capital Stock.	Number of Shares issued during Year.	Cash realized on Amt. issued during Year.	Total Number of Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common,	.....	.....	*66	*\$6,600.00
Issued for Construction: Preferred,	.....	.....	27,656	2,892,443.75
Issued for purchasing stock of minority stockholders in Nor. & N. Y. Trans. Co.,	36	\$6,300.00	36	6,300.00
Total, . . . . .	.....	.....	27,758	\$2,905,343.75

* To be converted into preferred stock whenever presented. No dividends declared on this.

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
1st Mortgage,	1877	1897	\$500,000.00	\$400,000.00	\$400,000.00	\$419,160.00

Funded Debt.—Continued.**INTEREST.**

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
6 per cent.	March and September, . . .	\$24,000.00	\$24,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mort. Bonds (p. 301),	\$400,000 00	\$400,000.00	\$24,000.00	\$24,000.00

Current Assets and Liabilities.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$153,807.49 Bills Receivable, . . . 150,000.00 Other Cash Assets (Excluding "Materials and Supplies"), 1,086.19 Balance,—Current Liabilities, 262,566.65 Total, \$567,460.33	Loans and Bills Payable, \$425,500.00 Audited Vouchers & Accts., 1,288.00 Dividends not called for, 3,023.00 Matured Interest Coupons unpaid (Including Coupons due July 1), . . . 420.00 Rents due July 1, . . . 129,229.33 Miscellaneous, accrued interest, 8,000.00 Total, \$567,460.33

Materials and Supplies on hand, \$42,478.62.

Recapitulation.

For mileage owned by road making this report :

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 301),	\$2,775,800.00	\$2,775,800.00	66.16	\$41,955.86
Bonds (p. 301), . . .	400,000.00	400,000.00	66.16	6,045.95
Total,	\$3,175,800.00	\$3,175,800.00	66.16	\$48,001.81

Cost of Road, Equipment, and Permanent Improvements.

Item.	Expenditures during Year, not included in Operating Expenses, chgd. to Income Ac't as Permanent Improvem'ts.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction: Grading, and Bridge and Culvert Masonry,	\$2,890.79			
Bldgs., Furniture & Fixtures,	49.56			
Total Construction, . . .	\$2,940.35	\$3,616,095.65	\$3,619,036.00	\$54,701.27
Total Equipment, . . .	.....	\$179,750.67	\$179,750.67	\$2,716.91
Grand Total cost Construction, Equipment, etc., .	}	\$3,795,846.32	\$3,798,786.67	\$57,418.18

Income Account.

Income from Lease of Road,	\$245,392.00	
Miscellaneous Income, less Expenses,	4,903.16	
Total Income,		\$250,295.16
Deductions from Income:		
Salaries and Maintenance of Organization,	\$340.00	
Interest on Funded Debt accrued (p. 302),	24,000.00	
Total Deductions from Income,		\$24,340.00
Net Income,		\$225,955.16
Dividends, 8 per cent., Preferred Stock, 27,656 shares,	110,624.00	
	27,692 "	110,768.00
		221,892.00
Surplus from operations of Year ending June 30, 1894,		4,563.16
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],		897,017.56
Additions for Year,		4,563.16
Surplus on June 30, 1894 [for entry on "General Balance Sheet"],		\$901,580.72

Stocks Owned.

Name.	Total Par Value.	Valuation.
Norwich & New York Transportation Co., . . .	\$495,575.00	\$495,575.00

Miscellaneous Income.

Item.	Gross Income.	Net Miscel. Income.
Income on Deposits,	\$2,203.16	\$2,203.16
Premium on 36 Shares Preferred Stock,	2,700.00	2,700.00
Total,		\$4,903.16

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$3,616,095.65	Cost of Road (p. 303),	\$3,619,036.00	\$2,940.35
179,750.67	Cost of Equipment (p. 303),	179,750.67	.....
489,275.00	Stocks Owned (p. 304),	495,575.00	6,300.00
3,107.08	Lands owned,	3,107.08	.....
154,394.87	Cash and Current Assets (p. 302),	304,893.68	150,498.81
42,478.62	Materials and Supplies,	42,478.62	.....
\$4,485,101.89	Grand Total,	\$4,644,841.05	\$159,739.16

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.
\$2,772,200.00	Capital Stock (p. 301),	\$2,775,800.00	\$3,600.00
400,000.00	Funded Debt, (p. 301),	400,000.00	.....
407,884.33	Current Liabilities (p. 302),	559,460.33	151,576.00
8,000.00	Accrued Interest on Funded Debt not yet payable,	8,000.00	.....
897,017.56	Profit and Loss,	901,580.72	4,563.16
\$4,485,101.89	Grand Total,	\$4,644,841.05	\$159,739.16

Security for Funded Debt (p. 301).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From—	To—	Miles.	
First Mortgage,	Allyn's Point, All in	Wilson's, Connecticut.	47.92	\$8,347.24

Description of Equipment.

Item.	Total Number at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
		No.	Name.	No.	Name.
Locomotives:					
Passenger,	7	7	Air.		
Freight,	5	5	"		
Switching,	8	8	Steam.		
Total,	20	20			
Cars in Passenger Service:					
First-class Cars, . .	11	11	Westinghouse.	11	Miller Hook.
Combination Cars, . .	3	3	"	3	"
Baggage, Express, and Postal Cars,	3	3	"	3	"
Total,	17	17	.....	17	
Cars in Freight Service:					
Box Cars, 4 wheels, . .	31				
Box Cars, 8 wheels, . .	224				
Coal Cars, 8 wheels, . .	184				
Coal Cars, 4 wheels, . .	300				
Total,	739				
Cars in Company's Service:					
Derrick Cars,	2				
Caboose Cars,	9				
Other Road Cars, . . .	1				
Total Cars in Service,	12				
Total Cars Owned, . .	768				

Mileage.

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Total Mileage Owned.	New Line Constructed during Year. Siding.	RAILS.	
	Main Line.	Branches and Spurs.			Iron.	Steel.
Allyn's Point to } Worcester, }	66.16	23.70	89.86	1.23	28.18	61.68

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
From—	To—	Miles.	Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
Allyn's Point	Worcester.	66.16	107	22.48	43.68

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate Length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate Length of Descending Grades. Miles.
13.78	14	143	11.72	16	624	40.66

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.	MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Feet.	Inches.
Bridges:						
Stone, . .	8	253	6	5	50	..
Iron, . .	13	992	6	20	235	..
Wooden, . .	17	1,320	..	18	285	..
Total, . .	38	.....	..	43	....	..
Trestles, . .	2	111	..	27½	84	..
Tunnels, . .	2	467	..	176	291	..

Characteristics of Road.—Continued.

HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:			
Bridges,	5	14	6
Trestles,	1	18	..
Total,	6	..	..

GAUGE OF TRACK—4 feet, 8 $\frac{1}{4}$ inches ; 89.86 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
58.9	267.6	Western Union Tel. Co.	Western Union Tel. Co.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW LONDON, } ss.

We, the undersigned, George H. Ball, President, and M. M. Whittemore, Treasurer, of the Norwich & Worcester Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

GEORGE H. BALL,
President.

M. M. WHITTEMORE,
Treasurer.

Subscribed and sworn to before me this 21st day of August, 1894.

IRA L. PECK,
Notary Public.

PHILADELPHIA, READING & NEW ENGLAND RAILROAD COMPANY.

History.

Name of common carrier making this report? Philadelphia, Reading & New England Railroad Company, J. K. O. Sherwood, Receiver, August 19, 1893.

Date of organization? August 1, 1892.

Under laws of what Government, State, or Territory organized? General Railroad Incorporation laws of the State of New York.

If a consolidated company, name the constituent companies. Merger of the Poughkeepsie Bridge Company, Incorporated in New York, May 31, 1871, and the Central New England & Western Railroad Company, formed July 22, 1889, by consolidation of the Hudson Connecting Railroad Company and the Poughkeepsie & Connecticut Railroad Company.

Date and authority for each consolidation? July 22, 1889, and August 1, 1892. Railroad Incorporation laws of the State of New York.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
C. TOWER, JR.,	Philadelphia, Pa.,	First Wed. in Feb'y, 1895.
W. R. TAYLOR,	" "	" " "
W. W. GIBBS,	" "	" " "
JAMES ARMSTRONG,	New York, N. Y.,	" " "
JOHN H. TAYLOR,	Philadelphia, Pa.,	" " "
M. A. VIELE,	New York, N. Y.,	" " "
ARTHUR BROCK,	Philadelphia, Pa.,	" " "
JOS. F. SINNOTT,	" "	" " "
JOHN W. BROCK,	" "	" " "
CHAS. HARTSHORNE,	" "	" " "
W. W. JENKS,	New York, N. Y.,	" " "
C. A. MORGAN,	Philadelphia, Pa.,	" " "
PIERSON BROWN,	New York, N. Y.,	" " "

Total number of stockholders at date of last election. 92.

Date of last meeting of stockholders for election of directors. February 1, 1894.

Post-office address of general office. Receiver's office, 192 Broadway, New York City.

Post-office address of operating office. Hartford, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed. H. W. Watson, Auditor, Hartford, Conn.

Officers.

Title.	Name.	Location of Office.
Receiver,	JAMES K. O. SHERWOOD,	192 Broadway, N. Y.
General Counsel,	JAMES ARMSTRONG,	" " "
Auditor,	H. W. WATSON,	Hartford, Conn.
General Manager,	C. M. LAWLER,	" "
Engineer,	C. H. EWING,	" "
Asst. Superintendent,	G. T. ROYER,	Poughkeepsie, N. Y.
General Freight Agent,	W. J. MARTIN,	Hartford, Conn.
General Passenger Agent,	W. J. MARTIN,	" "
President,	JOHN W. BROCK,	Philadelphia, Pa.
Vice-President,	CHAS. HARTSHORNE,	" "
Secretary,	W. A. CHURCH,	" "

Property Operated.

Name of every railroad the operations of which are included in the Income Account (pp. 314 and 315):

1. Railroad Line represented by Capital Stock. 3. Line Operated under Lease for specified sum. 5. Line Operated under Trackage Rights.

Name.	TERMINALS.		Miles of Line for each Road Named.	Miles of Line for each Class of Roads Named.
	From —	To —		
1. Phil., Reading & N. E. R. R.	Ca'bell Hall, N. Y.	Silvernails, N. Y.	57.60	57.60
3. Hartford & Conn. Western.	Hartford, Conn.	Rhinecliff, "	109.75	.....
Dutchess County, R. R.	Poughkeepsie, N. Y.	Hopewell, "	12.40	122.15
5. Newburg, Dutchess & Conn.	State Line, N. Y.	Millerton, "	1.25	1.25
Total Mileage Operated,			181.00	181.00

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Capital Stock:				
Common, . . .	46,000	\$100.00	\$4,600,000	\$4,600,000
Preferred, . . .	20,000	100.00	2,000,000	2,000,000
Total, . . .	66,000	\$100.00	\$6,600,000	\$6,600,000

Capital Stock.—Continued.

Manner of Payment for Capital Stock.	Total Number of Shares Issued and Outstanding.	Total Cash Realized.
Issued for reorganization: Common, . . .	46,000	\$4,600,000.00
Preferred, . . .	20,000	2,000,000.00
Total,	66,000	\$6,600,000.00

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
First Mortgage,	1892	1942	\$7,250,000	\$6,250,000	\$6,250,000	\$6,250,000
Income Firsts, .	1892	1952	1,750,000	1,750,000	1,750,000	1,750,000
Income Seconds,	1892	1952	2,100,000	2,100,000	2,100,000	2,100,000
Total:						
Mortgage Bonds,			\$7,250,000	\$6,250,000	\$6,250,000	\$6,250,000
Income Bonds,			3,850,000	3,850,000	3,850,000	3,850,000
Grand Total,			\$11,100,000	\$10,100,000	\$10,100,000	\$10,100,000

INTEREST.

Amount accrued during year, July 1 to Aug. 19, 1893 (4 and 5 %), . \$33,602.15

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued from July 1 to August 19, 1893.	Amount Paid during year.
Mtge. Bds. (p. 310),	\$6,250,000.00	\$6,250,000.00	\$33,602.15	.....
Income Bds (p.310),	3,850,000.00	3,850,000.00	.....	.....
Total, . . .	\$10,100,000.00	\$10,100,000.00	\$33,602.15	.....

Current Assets and Liabilities.

(Philadelphia, Reading & New England Railroad Company, July 1, 1893, to
August 19, 1893.)

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to August 19, 1893.
Cash, \$27,187.90 Bills Receivable, 22,697.99 Due from Agents, 102,152.91 Net Traffic Balances due from other Companies, 287,689.78 Due from Solvent Compa- nies and Individuals, 56,358.76 Total Cash and Cur- rent Assets, \$496,087.84 Bal. Current Liabilities, 862,386.17 Total, \$1,358,473.51	Loans and Bills Payable, \$374,537.50 Audited Vouchers and Accounts, 558,892.31 Wages and Salaries, 1,572.05 Net Traffic Balances due to other Companies, 274,578.83 Matured Interest Coupons unpaid, 148,893.32 Total Current Liabilities, \$1,358,473.51 Total, \$1,358,473.51

Materials and Supplies on hand, \$77,135.30.

Current Assets and Liabilities.

(Receiver, Aug. 19, 1893, to June 30, 1894.)

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$27,998.02 Due from Agents, 31,634.69 Due from Solvent Compa- nies and Individuals, 15,915.97 Total Cash and Cur- rent Assets, \$75,548.68 Bal. Current Liabilities, 653,400.62 Total, \$728,949.30	Loans and Bills Payable, \$355,662.50 Audited Vouchers and Accounts, 71,353.53 Wages and Salaries, 18,604.62 Net Traffic Balances due to other Companies, 270,451.86 Rents due July 1, 9,293.64 Miscellaneous, 3,583.15 Total Current Liabilities, \$728,949.30 Total, \$728,949.30

Materials and Supplies on hand, \$51,223.37.

Recapitulation.

a. For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 309), .	\$6,600,000.00	\$6,600,000.00	57.60	\$114,583
Bonds (p. 310), . . .	10,100,000.00	10,100,000.00	57.60	175,347
Current Liabilities, P., R. & N. E., Aug. 19, '93,	1,358,473.51	1,358,473.51	57.60	23,585
Current Liabilities, Receiver, . . .	728,949.30	728,949.30	57.60	12,655
Total, . . .	\$18,787,422.81	\$18,787,422.81	57.60	\$326,170

b. For mileage operated by road making this report (trackage rights excluded), the operations of which are included in the Income Account (pp. 314 and 315):

Name of Road.	Capital Stock.	Funded Debt.	Current Liabilities.	Total.	AMT. PER MILE OF LINE.	
					Miles.	Amount.
Phila., Read. & N. E.,	\$6 600,000 00	\$10,100,000.00	\$2,087,422.81	\$18,787,422.81	57.60	\$326,170.53
Hartford & Conn. West.,	2,683,100 00	700,000 00	.....	3,383,100.00	109.75	30,825.51
Dutchess County,	300,000.00	350,000.00	.....	650,000 00	12.40	52,419.35
Total, . . .	\$9,583,100.00	\$11,150,000.00	\$2,087,422.81	\$22,820,522.81	179.75	\$126,957.01

Cost of Road, Equipment, and Permanent Improvements.

Item.	Expenditures during year not included in Operating Expenses, charged to Construction or Equipment.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost Per Mile.
Construction:				
Right of Way,				
Other Real Estate,				
Fences,				
Grading, and Bridge and Culvert Masonry,				
Bridges and Trestles,				
Rails,				
Ties,				
Other Superstructure,				
Buildings, Furniture, and Fixtures,				
Shop Machinery and Tools,	*	*	*	*
Engineering Expenses,	\$50,922.09	\$15,857,725.04	\$15,806,802.95	\$274,423.66
Interest dur'g Construct'n,				
Discount on Securities Sold for Construction,				
Telegraph Line,				
Wharfing, etc.,				
Sidings and Yard Extensions,				
Terminal Facilities and Elevators,				
Road built by contract,				
Purchase of constructed road,				
Other items,				
Terminal facilities purchased by Receiver,	750.00	.....	750.00	13.02
Total Construction,	\$50,172.09	\$15,857,725.04	\$15,807,552.95	\$274,436.68
Equipment:				
Locomotives,	53,260.38	181,985.76	235,246.14	4,084.13
Passenger Cars, . . . . .	.....	51,966.99	51,966.99	902.20
Baggage, Express, and Postal Cars, . . . . .	.....	9,076.48	9,076.48	157.58
Freight Cars, . . . . .	.....	74,210.50	74,210.50	1,288.37
Other Cars of all classes,	225.00	4,696.86	4,921.86	85.46
At date, August 19, 1893,	\$53,485.38	\$321,936.59	\$375,421.97	\$6,517.74
Paid by Receiver on acct. of purchase of 10 locomotives and 100 freight cars,	51,671.92	.....	51,671.92	897.08
Total Equipment,	\$105,157.30	\$321,936.59	\$427,093.89	\$7,414.82
Grand Total cost construction, Equipment, etc.,	\$54,985.21	\$16,179,661.63	\$16,234,646.84	\$281,851.50

* At date, August 19, 1893.

Income Account.

(Entire Year.)

Gross Earnings from Operation,	\$781,068.71	
Less Operating Expenses,	768,381.14	
Income from Operation,		\$12,687.57
Deductions from Income:		
Interest on Funded Debt accrued,	\$33,602.15	
Interest on Interest-bearing Current Liabilities,	23,014.16	
Rents paid for lease of road,	82,911.15	
Taxes,	31,020.88	
Total Deductions from Income,		170,548.34
Deficit,		\$157,860.77
Other payments from Net Income,		690.00
Deficit from Operations of year ending June 30, 1894,		\$158,550.77
Deficit on June 30, 1893,		331,380.18
Deficit on June 30, 1894,		\$489,930.95

Income Account.

(P., R. & N. E. R. R. Co., July 1, 1893, to August 19, 1893.)

Gross Earnings from Operation,	\$136,658.11	
Less Operating Expenses,	191,606.38	
Deficit from Operation,		\$54,948.27
Deductions from Income:		
Interest on Funded Debt accrued,	\$33,602.15	
Interest on Interest-bearing Current Liabilities,	2,230.61	
Rents paid for lease of road,	11,776.88	
Taxes,	1,937.01	
		49,546.65
Deficit,		\$104,494.92
Other payments from Net Income,		690.00
Deficit from Operation, July 1, 1893, to Aug. 19, 1893,		\$105,184.92
Deficit on June 30, 1893,		331,380.18
Deficit on August 19, 1893,		\$436,565.10

Income Account.—Continued.

(Aug. 19, 1893, to June 30, 1894.)

Gross Earnings from Operation (p. 316),	\$644,410.60
Less Operating Expenses (p. 318),	576,774.76
Total Income from Operation,	\$67,635.84
Deductions from Income:	
Interest on Interest-bearing Current Liabilities accrued, not otherwise provided for,	\$20,783.55
Rents paid for lease of road (p. 319),	71,134.27
Taxes,	29,083.87
Total Deductions from Income,	\$121,001.69
Deficit from Operations, Aug. 19, 1893, to June 30, 1894,	53,365.85
Deficit on Aug. 19, 1893, to June 30, 1894 [for en- try on "General Balance Sheet"],	\$53,365.85

Earnings from Operation.

(P., R. & N. E. R. R. Co., July 1 to August 19, 1893).

Item.	Total Receipts.	Actual Earnings.
Passenger: Passenger Revenue,		\$46,172.80
Mail,	\$1,204.90	
Express,	1,500.00	
Other items,	578.71	
		3,283.61
Total Passenger Earnings,		\$49,456.41
Total Freight Earnings,		85,708.99
Total Passenger and Freight Earnings,		\$135,165.40
Other Earnings from Operation:		
Other sources,		1,492.71
Total Gross Earnings from Operation — Entire Line,		\$136,658.11

Earnings from Operation.— Continued.
 (Receiver, August 19, 1893, to June 30, 1894.)

Item.	Total Receipts.	Deductions, Acct. of Repay- ments, etc.	Actual Earnings.
Passenger: Passenger Revenue, . . .	\$161,835.01		
Less Repayments:			
Tickets redeemed, . . .		\$297.00	
Excess Fares refunded, . . .		805.20	
Total Deductions, . . .		\$1,102.20	
Total Passenger Revenue, . . .			\$160,732.81
Mail, . . .			8,290.15
Express, . . .			28,746.75
Total Passenger Earnings, . . .			\$197,769.71
Freight: Freight Revenue, . . .	\$443,415.33		
Less Repayments:			
Overcharge to Shippers, . . .		\$1,750.10	
Total Deductions, . . .		1,750.10	
Total Freight Revenue, . . .			\$441,665.23
Total Freight Earnings, . . .			441,665.23
Total Passenger and Freight Earnings, . . .			639,434.94
Other Earnings from Operation:			
Rents not otherwise provided for, . . .			4,947.43
Other Sources, . . .			28.23
Total Gross Earnings from Operation } — Entire Line, . . . }			\$644,410.60

Item.	Total Receipts.	Deductions, Acct. of Repay- ments, etc.	Actual Earnings.
Passenger: Passenger Revenue, . . .	\$208,007.81		
Less Repayments: Tickets Redeemed, . . .		\$297.00	
Excess Fares refunded, . . .		805.20	
Total Deductions, . . .		\$1,102.20	
Total Passenger Revenue, . . .			\$206,905.61
Mail, . . .			9,495.05
Express, . . .			30,246.75
Other Items, . . .			578.71
Total Passenger Earnings, . . .			\$247,226.12
Freight: Freight Revenue, . . .	529,124.32		
Less Repay'ts: Overcharge to Shippers, . . .		\$1,750.10	
Total Deductions, . . .		1,750.10	
Total Freight Revenue, . . .			\$527,374.22
Total Freight Earnings, . . .			527,374.22
Total Passenger and Freight Earnings, . . .			774,600.34
Other Earnings from Operation:			
Rents not otherwise provided for, . . .			4,947.43
Other Sources, . . .			1,520.94
Total Other Earnings, . . .			6,468.37
Total Gross Earnings from Operation } — Entire Line, . . . }			\$781,068.71

Stocks Owned.

Name.	Total Par Value.	Valuation.
Hartford & Conn. Western Railroad Company,	\$1,390,200.00	\$900,063.00

Operating Expenses.

Item.	July 1, 1893, to Aug. 19, 1893.	Aug. 19, 1893, to June 30, 1894.	Amount.
Maintenance of Way and Structures:			
Repairs of Roadway,	\$19,016.53	\$59,287.38	\$78,303.91
Renewals of Ties,	9,274.70	14,234.08	23,508.78
Repairs of Bridges and Culverts, . .	5,520.94	16,176.93	21,697.87
Repairs of Fences, Road crossings, Signs, and Cattle Guards, . . . . .	.....	3,566.09	3,566.09
Repairs of Buildings,	809.21	10,112.52	10,921.73
Other expenses,	3,165.61	3,627.23	6,792.84
Total,	\$37,786.99	\$107,004.23	\$144,791.22
Maintenance of Equipment:			
Repairs and Renewals of Locomotives, .	24,477.53	40,406.89	64,884.42
Repairs and Renewals of Pass. Cars, .	1,606.76	9,442.24	11,049.00
Repairs and Renewals of Freight Cars, .	13,628.46	19,831.70	33,460.16
Shop Machinery, Tools, etc.,	240.00	1,625.35	1,865.35
Other Expenses,	477.58	7,912.50	8,390.08
Total,	\$40,430.33	\$79,218.68	\$119,649.01
Conducting Transportation:			
Wages of Enginemen, Firemen, and Roundhouse men,	\$11,868.33	\$53,286.58	\$64,654.91
Fuel for Locomotives,	30,529.27	94,294.03	124,823.30
Water-supply for Locomotives, . . . . .	.....	4,675.23	4,675.23
All other Supplies for Locomotives, . .	1,771.88	3,922.13	5,754.01
Wages of other Trainmen,	25,985.75	59,054.91	85,040.66
All other train supplies,	3,275.59	1,324.32	4,599.91
Wages of Switchmen, Flagmen, and Watchmen,	1,323.41	9,962.56	11,285.97
Expenses of Telegraph, incldg. Train Dispatchers and Operators,	1,853.69	11,623.79	13,477.48
Wages of Sta. Agts., Clerks, & Laborers, .	7,407.96	49,354.44	56,762.40
Station Supplies,	200.21	2,758.73	2,958.94
Switching Charges—Balance, . . . . .	.....	656.90	656.90
Car Mileage—Balance,	13,150.44	37,267.94	50,418.38
Loss and Damage, . . . . .	.....	381.17	381.17
Injuries to persons, . . . . .	.....	208.43	208.43
Other expenses,	15,025.33	5,244.96	20,270.29
Total,	\$111,891.86	\$334,076.12	\$445,967.98

Operating Expenses.—Continued.

Item.	Julv 1, 1893, to Aug. 19, 1893.	Aug. 19, 1893, to June 30, 1894.	Amount.
General Expenses :			
Salaries of Officers and Clerks,	\$916.66	\$28,397 50	\$29,314.16
Advertising,		1,563.99	1,563.99
Insurance,		895.01	895.01
Rents of Tracks, Yards, & Terminals,		1,000.00	1,000.00
Rents not otherwise provided for,	240.74	805 00	1,045.74
Legal Expenses,		13,707.99	13,707 99
Stationery and Printing,	187.90	7,459.40	7,647.30
Other general expenses,	151.90	2,646.84	2,798.74
Total,	\$1,497.20	\$56,475.73	\$57,972.93
Recapitulation of Expenses :			
Maintenance of Way and Structures,	37,786.99	107,004.23	144,791.22
Maintenance of Equipment,	40,430 33	79,218.68	119,649.01
Conducting Transportation,	111,891.86	334,076.12	445,967.98
General Expenses,	1,497.20	56,475.73	57,972.93
Grand Total,	\$191,606.38	\$576,774.76	\$768,381.14
Percentage of Expenses to Earnings,— } Entire Line, }	1.402	.895	.98374

Rentals Paid.

(July 1, to August 19, 1893.)

a. Rents paid for lease of road:

Name.	Interest on Bonds Guaranteed.	Dividends on Stock Guaranteed.	Cash.	Total.
Hfd. & Conn. West. R. R.	\$4,763.90	\$3,593.63	.....	\$8,357.53
Dutchess County R. R.,	2,419.35	.....	\$1,000.00	3,419.35
Total,	\$7,183.25	\$3,593.63	\$1,000.00	\$11,776.88

Rentals Paid.—Continued.

(August 20, 1893, to June 30, 1894.)

Name.	Interest on Bonds Guaranteed	Dividends on Stocks Guaranteed.	Cash.	Total.
Hfd. & Conn. West. R. R.,	\$30,295.70	\$22,661.15	.....	\$52,956.85
Dutchess County R. R.,	18,177.42	.....	.....	18,177.42
Total,	\$48,473.12	\$22,661.15	.....	\$71,134.27
Total Rents— <i>a</i> ,	\$55,656.37	\$26,254.78	\$1,000.00	\$82,911.15

b. Rents paid for lease of other property:

Designation of Property.	Situation of Property Leased.	Name of Company Owning Property Leased.	Total.
Tracks:	State Line and Miller-ton, N. Y.	Newburg, Dutchess & Conn. R. R. Co.,	\$1,000.00

Comparative General Balance Sheet.

(P., R. & N. E. R. R. Co., Balance Sheet.)

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$15,857,725.04	Cost of Road (p. 313),	\$15,806,802.95	.....	\$50,922.09
321,936.59	Cost of Equipment (p. 313)	375,421.97	\$53,485.38	.....
900,063.00	Stocks owned (p. 317),	900,063.00	.....	.....
180,744.92	Cash and Current Assets,	496,087.34	315,342.42	.....
57,890.13	Materials and Supplies,	77,135.30	19,245.17	.....
331,380.18	Profit and Loss,	436,565.10	105,184.92	.....
\$17,649,739.86	Grand Total,	\$18,092,075.66	\$493,257.89	\$50,922.09

Comparative General Balance Sheet.—Continued.
(Receiver's Balance Sheet.)

Assets.	Total, June 30, 1894.
Construction,	\$750.00
Equipment,	51,671.92
Cash and Current Assets (p. 311),	75,548.68
Machinery, Tools, etc.,	34,320.74
Betterments, Hartford & Connecticut Western Railroad,	8,383.50
Bills prior to Receivership,	390,748.07
Balance Account prior to Receivership,	67,937.17
Materials and Supplies,	51,223.37
Profit and Loss,	53,365.85
 Grand Total,	 \$728,949.30

(P., R. & N. E. R. R. Co., Balance Sheet.)

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$6,600,000.00	Capital Stock (p. 309),	\$6,600,000.00	.....	.....
10,100,000.00	Funded Debt (p. 310),	10,100,000.00	.....	.....
860,473.20	Current Liabilities (p. 311),	1,358,473.51	\$498,000.31	.....
89,266.66	Accrued Interest on Fund- ed Debt not yet payable,	33,602.15	.....	\$55,664.51
 \$17,649,739.86	 Grand Total,	 \$18,092,075.66	 \$498,000.31	 \$55,664.51

(Receiver's Balance Sheet.)

Liabilities.	Total, June 30, 1894.
Current Liabilities,	\$728,949.30

Important Changes during the Year.

Mr. James K. O. Sherwood was appointed Receiver at date of August 19, 1893, and is operating the road since that date.

Contracts, Agreements, etc.

United States Express Co.—40 per cent. of gross receipts accrue to R. R. Co.
 Mails—U. S Government—Compensation based on service and weight of mails.
 Pullman's Palace Car Company furnish cars and retain all receipts for the use thereof. No service since November 19, 1893.

Western Union Telegraph Company own and operate entire telegraph line. Railroad Company has use of same for railroad business.

Security for Funded Debt (page 310).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.	What Equipment for Secur'ts Mortgag'd.	What Income Mortgaged.
	From—	To—	Miles.			
Mortgage,	Campbell Hall, N. Y.	Silvernails, N. Y.	57.60	\$175,347	All.	*

* When earned, 5 per cent. on \$1,750,000; 5 per cent. on \$2,100,000.

Employes and Salaries.

(August 19, 1893, to June 30, 1894.)

Class.	Num-ber.	Total No. of Days Worked.	Total Yearly Com-pensation.	Av. Daily Compen-sation.
General Officers,	10	2,710	\$14,352.20	\$5.30
General Office Clerks,	29	6,532	14,045.30	2.15
Station Agents,	40	11,653	21,568.05	1.85
Other Station Men,	43	19,028	29,873.91	1.57
Enginemen,	33	12,431	31,699.55	2.55
Firemen,	28	12,238	22,028.49	1.80
Conductors,	21	6,510	18,813.90	2.89
Other Trainmen,	65	26,424	41,221.20	1.56
Machinists,	19	6,233	11,032.41	1.77
Carpenters,	28	12,367	21,395.53	1.73
Other Shopmen,	86	23,303	33,090.95	1.42
Section Foremen,	32	8,672	14,742.40	1.70
Other Trackmen,	75	32,961	43,838.06	1.33
Switchmen, Flagmen, and Watchmen, .	17	9,198	10,025.69	1.09
Telegraph Operators and Dispatchers, .	15	6,861	11,389.52	1.66
Total (including "General Officers"),	541	197,121	\$339,117.16	\$1.72
Less "General Officers,"	10	2,710	14,352.20	5.30
Total (excluding "General Officers"),	531	194,411	\$324,764.96	\$1.67
Distribution of Above :				
General Administration,	39	9,242	28,397.50	3.07
Maintenance of Way and Structures, .	135	54,000	79,975.99	1.48
Maintenance of Equipment,	105	29,536	44,123.36	1.49
Conducting Transportation,	262	104,343	186,620.31	1.78
Total (including "General Officers")— } Entire Line, }	541	197,121	\$339,117.16	\$1.72

Passenger, Freight, and Train Mileage.

(July 1 to August 19, 1893.)

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	78,713			
No. of passengers carried one mile,	1,805,081			
No. of pass. car'd one mile per mile of road,	9,972			
Average distance carried,	22.93			
Total passenger revenue,		46,172	80	
Average amt received from each passenger,			58	6.60
Average receipts per passenger per mile,			02	5.57
Total passenger earnings,		49,456	41	
Passenger earnings per mile of road,		273	24	
Passenger earnings per train mile,			84	1.73
Freight Traffic:				
Number of tons carried of fgt. earning rev.,	147,513			
Number of tons carried one mile,	9,220,967			
No. of tons car'd one mile per mile of road,	50,944			
Average distance haul of one ton,	62.50			
Total freight revenue,		85,708	99	
Average amt. rec'd for each ton of freight,			58	1.03
Average receipts per ton per mile,				9.30
Total freight earnings,		85,708	99	
Freight earnings per mile of road,		473	53	
Freight earnings per train mile,			75	
Passenger and Freight:				
Passenger and freight revenue,		131,881	79	
Pass. and freight revenue per mile of road,		728	63	
Passenger and freight earnings,		135,165	40	
Pass. and freight earnings per mile of road,		746	77	
Gross earnings from operation (p. 315),		136,658	11	
Gross earn'gs from operation per mile of road,		755	01	
Gross earnings from operation per train mile,			78	9.77
Operating expenses (p. 318),		191,606	38	
Operating expenses per mile of road,		1,058	60	
Operating expenses per train mile,		1	10	7.33
Income from operation,		54,948	27	
Income from operation per mile of road,		303	58	
Train Mileage:				
Miles run by passenger trains,	58,756			
Miles run by freight trains,	114,278			
Total Mileage Trains Earning Revenue,	173,034			
Miles run by switching trains,	24,124			
Miles run by construction and other trains,	7,920			
Grand Total Train Mileage,	205,078			

Passenger, Freight, and Train Mileage.

(August 19, 1893, to June 30, 1894.)

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	348,561			
No. of passengers carried one mile,	7,772,651			
No. of pass. car'ed one mile per mile of road,	42.943			
Average distance carried,	22.29			
Total passenger revenue,		160,732	81	
Average am't received from each passenger,			46	1.13
Average receipts per passenger per mile,			02	0.68
Total passenger earnings,		197,769	71	
Passenger earnings per mile of road,		1,092	64	
Passenger earnings per train mile,			69	3.99
Freight Traffic:				
No. of tons carried of freight earning rev.,	641,864			
Number of tons carried one mile,	51,053,122			
No. of tons car'ed one mile per mile of road,	282,061			
Average distance haul of one ton,	79.52			
Total freight revenue,		441,665	23	
Average am't rec'd for each ton of freight,			68	8.10
Average receipts per ton per mile,				8.65
Total freight earnings,		441,665	23	
Freight earnings per mile of road,		2,440	14	
Freight earnings per train mile,		1	03	5.61
Passenger and Freight:				
Passenger and freight revenue,		602,398	04	
Pass. and freight revenue per mile of road,		3,328	17	
Passenger and freight earnings,		639,434	94	
Pass. and freight earnings per mile of road,		3,532	78	
Gross earnings from operation,		644,410	60	
Gross earn'gs from operat'n per mile of road,		3,560	28	
Gross earn'gs from operation per train mile,			90	5.77
Operating expenses,		576,774	76	
Operating expenses per mile of road,		3,186	60	
Operating expenses per train mile,			81	0.71
Income from operation,		67,635	84	
Income from operation per mile of road,		373	68	
Train Mileage:				
Miles run by passenger trains,	280,497			
Miles run by freight trains,	413,057			
Miles run by mixed trains,	17,893			
Total Mileage Trains Earning Revenue,	711,447			
Miles run by switching trains,	87,087			
Miles run by construction and other trains,	18,681			
Grand Total Train Mileage,	817,215			

Passenger, Freight, and Train Mileage.

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	427,274			
Number of passengers carried one mile,	9,577,732			
No. of pass. ca'rd one mile per mile of road,	52,915			
Average distance carried,	22.41			
Total passenger revenue,		206,905	61	
Av. amount received from each passenger,			48	4.25
Average receipts per passenger per mile,			02	1.60
Total passenger earnings,		247,226	12	
Passenger earnings per mile of road,		1,365	88	
Passenger earnings per train mile,			71	9.25
Freight Traffic:				
No. of tons carried of freight earning rev.,	789,377			
Number of tons carried one mile,	60,274,089			
No. of tons ca'rd one mile per mile of road,	333,006			
Average distance haul of one ton,	76.35			
Total freight revenue,		527,374	22	
Av. amount received for each ton of freight,			66	8.09
Average receipts per ton per mile,				8.75
Total freight earnings,		527,374	22	
Freight earnings per mile of road,		2,913	67	
Freight earnings per train mile,			97	5.26
Passenger and Freight:				
Passenger and freight revenue,		734,279	83	
Pass. and freight revenue per mile of road,		4,056	80	
Passenger and freight earnings,		774,600	34	
Pass. and freight earnings per mile of road,		4,279	56	
Gross earnings from operation (p. 315),		781,068	71	
Gross earnings from operation per m. of road,		4,315	25	
Gross earnings from operation per train mile,			88	3.08
Operating expenses (p. 318),		763,381	14	
Operating expenses per mile of road,		4,245	20	
Operating expenses per train mile,			86	8.74
Income from operation,		12,687	57	
Income from operation per mile of road,		70	09	
Train Mileage:				
Miles run by passenger trains,	339,253			
Miles run by freight trains,	527,335			
Miles run by mixed trains,	17,893			
Total Mileage Trains Earning Revenue,	884,481			
Miles run by switching trains,	111,211			
Miles run by construction and other trains,	28,601			
Grand Total Train Mileage,	1,022,293			
Mileage of loaded freight cars—North or East,				
Mileage of loaded freight cars—South or West,				
Mileage of empty freight cars—North or East,				
Mileage of empty freight cars—South or West,				
Average number of freight cars in train,	No record.			
Average number of loaded cars in train,				
Average number of empty cars in train,				
Average number of tons of freight in train,				
Av. No. of tons of freight in each loaded car,				

Freight Traffic Movement.

Commodity.	Freight Originating on this Road.	Freight Received from Con- necting Roads and other Carriers.	TOTAL FREIGHT TONNAGE.	
	Whole Tons.	Whole Tons.	Whole Tons.	Per Ct.
Products of Agriculture:				
Grain,	2,370	42,727	45,097	7.05
Flour,	1,921	16,448	18,369	2.86
Other Mill Products,	2,277	8,482	10,759	1.70
Hay,	6,721	8,621	15,342	2.40
Tobacco,	605	133	738	.12
Cotton, . . . . .	.....	6,385	6,385	1.00
Fruit and Vegetables,	5,151	2,771	7,922	1.24
Products of Animals:				
Live Stock,	796	394	1,190	.19
Dressed Meats,	842	494	1,336	.22
Other Packing-House Products,	129	684	813	.13
Poultry, Game, and Fish,	21	572	593	.10
Wool,	297	1,006	1,303	.20
Hides and Leather,	268	4,081	4,349	.69
Products of Mines:				
Anthracite Coal, . . . . .	.....	231,011	231,011	35.68
Bituminous Coal, . . . . .	.....	72,345	72,345	11.28
Coke,	4,570	2,452	7,022	1.09
Ores,	6,555	607	7,162	1.13
Stone, Sand, and other like articles,	3,248	6,675	9,923	1.55
Products of Forest:				
Lumber,	9,429	23,049	32,478	5.07
Manufactures:				
Petroleum and other Oils,	549	1,431	1,980	.31
Sugar,	253	262	515	.08
Iron, Pig and Bloom,	5,831	10,699	16,530	2.52
Iron and Steel Rails,	718	8,785	9,503	1.51
Other Castings and Machinery,	1,812	27,997	29,809	4.64
Bar and Sheet Metal,	498	3,865	4,363	.71
Cement, Brick, and Lime,	19,258	3,342	22,600	3.51
Agricultural Implements,	189	95	284	.05
Wagons, Carriages, Tools, etc.,	1,116	1,191	2,307	.37
Wines, Liquors, and Beers,	563	774	1,337	.21
Household Goods and Furniture,	612	667	1,279	.20
Merchandise,	15,579	24,040	39,619	6.34
Miscellaneous: Other commodities not mentioned above,	14,245	23,306	37,551	5.85
Total Aug. 19, 1893, to June 30, 1894,	106,473	535,391	641,864	100.00
Anthracite Coal, . . . . .	.....	91,283	91,283	61.88
Merchandise,	15,647	40,583	56,230	38.12
Total July 1 to Aug. 19, 1893,	15,647	131,866	147,513	100.00
Grand Total,	122,120	667,257	789,377	.....

Description of Equipment.

Item.	Number added during Year.	Total Number at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
			No.	Name.	No.	Name.
Locomotives owned & leased:						
Passenger,	3	15	15	Westinghouse.		
Freight,	7	23	18	"		
Switching,		1				
Total Locomotives in service,	10	39	33			
Less Locomotives leased, H. & C. W. Railroad,		17				
Total Locomotives owned,		22				
Cars in Passenger Service:						
First-class Cars,		11	11	Westinghouse.	11	Miller.
Second-class Cars,		2	2	"	2	"
Combination Cars,		5	5	"	5	"
Baggage, Ex. & Postal Cars,		9	9	"	9	"
Total,		27	27	Westinghouse.	27	Miller.
In Freight Service:						
Box Cars,		158				
Flat Cars,		36				
Stock Cars,		4				
Coal Cars,	100	383			100	Gould.
Total,	100	581			100	
In Company's Service:						
Derrick Cars,		2				
Caboose Cars,		22				
Other road Cars,		8				
Total Cars in service,		638				
Less Cars leased, H. & C. W. Railroad,		466				
Total Cars owned,		172				

Mileage.*a.* Mileage of road operated (all tracks):

Line in Use.	Line Represented by Capital Stock. Main Line.	Line Operated under Lease.	Line Operated under Trackage Rights.	Total Mileage Operated.	Iron Rails.	Steel Rails.
Miles of single track,	57.60	122.15	1.25	181.00	4.85	176.15
Miles of second track,	4.60	.....	.....	4.60	.....	4.60
Miles of yard track and sidings,	15.30	26.50	.....	41.80	25.10	16.70
Total,	77.50	148.65	1.25	227.40	29.95	197.45

b. Mileage of line operated by States and Territories (single track):

State or Territory.	Line Represented by Capital Stock. Main Line.	Line Operated under Lease.	Line Operated under Trackage Rights.	Total Mileage Operated.	Iron Rails.	Steel Rails.
New York,	57.60	54.90	1.25	113.75	4.85	108.90
Connecticut, . . . . .	.....	67.25	.....	67.25	.....	67.25
Total,	57.60	122.15	1.25	181.00	4.85	176.15

c. Mileage of line owned by States and Territories (single track):

State or Territory.	Line Represented by Capital Stock. Main Line.	Total Mileage Owned.	Steel Rails.
New York,	57.60	57.60	57.60

Renewals of Rails and Ties.

NEW TIES LAID DURING YEAR.

Kind.	Number.	Average Price at Distributing Point.
Pine and Oak:		
July to August 19, 1893,	14,864	57 cts.
August 19, 1893, to June 30, 1894,	24,882	57 "
Total,	39,246	57 cts.

Consumption of Fuel by Locomotives.

(August 19, 1893, to June 30, 1894.)

Locomotives.	Anthracite Coal — Tons.	Bituminous Coal — Tons.	Soft Wood — Cords.	Total Fuel Consumed — Tons.	Miles Run.	Average Pounds Con- sumed per Mile.
Passenger,	645	9,860	20	10,515	284,970	73.79
Freight,	3,990	18,284	62	22,305	426,477	104.60
Switching,	717	3,003	10	3,725	87,087	85.55
Construction,	41	725	2	767	18,681	82.11
Total,	5,393	31,872	94	37,312	817,215	91.31
Av. cost at dis. pt.,	\$3.65	\$2.45	\$3.00			

Accidents to Persons.**EMPLOYES.**

Kind of Accident.	Trainmen Killed.	Trainmen Injured.	Total Killed.	Total Injured.
Coupling and Uncoupling, . . . . .	.....	1	.....	1
Falling from Trains and Engines, .	1	3	1	3
Collisions, . . . . .	.....	1	.....	1
Total,	1	5	1	5

OTHERS.

Kind of Accident.	Passengers Injured.	Trespassing Injured.	Total Injured.
Collisions,	1	.....	1
At Stations, . . . . .	.....	3	3
Total,	1	3	4

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
			Number of	Aggregate	Length of
From—	To—	Miles.	Curves.	Length of Curved Line. Miles.	Straight Line. Miles.
Campbell Hall, N. Y.	Silvernails, N. Y., .	57.60	88	15.44	42.16
Hartford, Conn.	Rhinecliff, N. Y., .	109.75	333	49.76	59.99
Poughkeepsie, N. Y.	Hopewell, N. Y., .	12.40	23	3.39	9.01
Total,		179.75	444	68.59	111.16

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate Length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate Length of Descending Grades. Miles.
19.57	28	673.9	22.24	19	545.1	15.79
14.50	75	1,941.1	44.95	83	1,969.2	50.30
2.60	8	210.0	5.50	7	154.0	4.30
36.67	111	2,825.0	72.69	109	2,668.3	70.39

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Stone,	2	24	....	12	....	12	....
Iron,	83	9,884	10	5	....	6,767	3
Wooden,	126	2,940	1	5	....	255	....
Total,	211	12,848	11	..	....	....	....
Trestles,	60	15,398	3	16	....	1,883	....

Characteristics of Road.—*Continued.***HIGHWAY CROSSINGS.**

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings:			
Bridges,	15	16	0

GAUGE OF TRACK—4 feet, 8½ inches; 57.60 miles.

Telegraph.

Owned by another company, but located on property of road making this report.

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
176.40	445	Western Union Tel. Co.	Western Union Tel. Co.

Car Mileage.

Individuals, Co-operative Fast Freight Lines, and Stock Companies to which the Company making this Report pays Mileage for the use of Cars.

Arms Palace Horse Car Company, Armour Refrigerator Line.
 Blue Line, Burton Stock Car Company.
 Canada Southern Line, Commercial Express Line, Canada Pacific Despatch,
 California Fast Freight Line, Canada Atlantic and Central Vermont Line.
 Eagle Consolidated Tank Line, Erie Despatch Line, Empire Line, Eastern
 Freight Car Heater Company, Erie & Milwaukee Line, Emery Manufacturing
 Company, Ellsworth & Company.
 Georgian Bay Lumber Line, Great Eastern Line, Great Western Despatch.
 Hoosac Tunnel Line.
 Iron Car Express Coal Line.
 Kanawha Valley Rolling Stock Company, Keystone Palace Horse Car Com-
 pany.
 Lackawanna Line, Lehigh Valley Despatch, Lehigh & Wabash Despatch.
 Merchants Despatch Transportation Company, Morris & Company, Milwau-
 kee & Michigan Line, Midland Line.
 National Car Company, Nickel Plate Line, National Despatch Line, New
 York Despatch Refrigerator Line, Northern & Central Vermont Line.
 Ottawa & Boston Lumber Line, Ontario Despatch.
 Pullman's Palace Car Company, Philadelphia & Reading Despatch.
 Red Line.
 Saginaw Valley Line, Star Union Line, Southern Iron Car Line.
 Traders Despatch, Tonawanda Lumber Line.
 Union Line, Union Tank Line.
 White Line, West Shore Line, Wyoming Car Trust, West Michigan Equip-
 ment Company.

Oath.

STATE OF CONNECTICUT, }
 COUNTY OF HARTFORD, } ss.

We, the undersigned, C. M. Lawler, General Manager, and H. W. Watson, Auditor for the Receiver of the Philadelphia, Reading & New England Railroad Company, on our oath do severally say that the foregoing return has been prepared under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing returns embrace all the financial operations of said Company during the period for which said return is made.

C. M. LAWLER,
General Manager.

H. W. WATSON,
Auditor.

Subscribed and sworn to before me this 11th day of September, 1894.

ALEXANDER K. McCORKELL,
Notary Public

RIDGEFIELD & NEW YORK RAILROAD COMPANY.

History.

Name of common carrier making this report? Ridgefield & New York Railroad Company.

Date of Organization? June 1, 1869.

Under laws of what Government, State, or Territory organized? Connecticut and New York. Chartered in Connecticut by the Legislature, June 7, 1867. Amendments to charter in Connecticut July 5, 1870; July 6, 1870; July 15, 1874; Feb. 24, 1880; April 20, 1884; Feb. 19, 1886; and May 15, 1889.

Chartered by the Legislature of New York May 6, 1872, chap. 353; and April 12, 1873, chap. 207.

Organization.

Names of Directors.	Post-Office Address.	Expiration of Term.
WM. J. MEAD,	Greenwich, Conn.,	1st Tuesday of June, 1895.
CORNELIUS MEAD,	" "	" "
WILLIAM P. ABENDROTH,	Port Chester, N. Y.,	" "
ELLWOOD BURDSALL,	" "	" "
RICHARD H. BURDSALL,	" "	" "
DANIEL L. ADAMS,	New Haven, Conn.,	" "
HIRAM K. SCOTT,	Ridgefield, Conn.,	" "
HIRAM K. SCOTT, JR.,	" "	" "
CECIL C. HIGGINS,	New York City,	" "

Total number of stockholders at date of last election: 121.

Date of last meeting of stockholders for election of directors: June 5, 1894.

Post-office address of general office: Ridgefield, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed: Hiram K. Scott, Secretary and Treasurer, Ridgefield, Conn.

Officers.

Title.	Name.	Location of Office.
Chairman of the Board,	WILLIAM J. MEAD,	Greenwich, Conn.
President,	WILLIAM J. MEAD,	" "
Vice-President,	ELLWOOD BURDSALL,	Port Chester, N. Y.
Secretary,	HIRAM K. SCOTT,	Ridgefield, Conn.
Treasurer,	HIRAM K. SCOTT,	" "

Road Projected.

Name.	TERMINALS.		Miles of Line for each class of roads named.
	From—	To—	
Ridgefield & N. York,	Danbury, Conn.	Port Chester, N. Y.	30.45

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Common, . . .	25,000	\$50.00	\$1,250,000.00	\$251,800.00

Manner of Payment for Capital Stock.	Total Number of Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common,	4,108	\$205,400.00
Issued for stock of delinquent subscribers sold at auction,	928	14,300.00
Total,	5,036	\$219,700.00

Recapitulation.

For mileage owned by road making this report:

Account.	Total Amount Outstanding.	AMOUNT PER MILE OF LINE.	
		Miles.	Amount.
Capital Stock (p. 333),	\$251,800.00	30.45	\$8,269.29

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction:			
Right of Way,	\$15,980.50	\$15,980 50	\$540.80
Grading, Bridge and Culvert Masonry,	154,767.04	154,767.04	5,082.66
Engineering Expenses,	15,097.97	15,097.97	495.82
Other items,	35,014.65	35,014.65	1,149.90
Total Construction,	\$220,860.16	\$220,860.16	\$7,253.18

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.
\$220,860.16	Cost of Road (p. 333),	\$220,860.16
30,939.84	Profit and Loss,	30,939.84
\$251,800.00	Grand Total,	\$251,800.00

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.
\$251,800.00	Capital Stock (p. 333),	\$251,800.00

Oath.

STATE OF CONNECTICUT, }
COUNTY OF FAIRFIELD, } ss.

We, the undersigned, William J. Mead, President, and Hiram K. Scott, Treasurer, of the Ridgefield & New York Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

WILLIAM J. MEAD,
President.

HIRAM K. SCOTT,
Treasurer.

Subscribed and sworn to before me this 3d day of September, 1894.

JACOB M. LAYTON,
Notary Public.

THE SHEPAUG, LITCHFIELD & NORTHERN RAILROAD COMPANY.

History.

Name of common carrier making this report? The Shepaug, Litchfield & Northern Railroad Company.

Date of organization? May, 1887.

Underlaws of what Government, State, or Territory organized? Connecticut, Special Acts 1887, p. 478; 1889, pp. 847, 1342.

If a reorganized company, give name of original corporation, and refer to laws under which it was organized:

Chartered as Shepaug Valley Railroad Company, May 1868; road opened January 1, 1872; reorganized as Shepaug Railroad Company in 1873 and reorganized under present name as above.

Organization.

Names of Directors.	Post-office Address.	Expiration of Term.
CHARLES P. CLARK,	New Haven, Conn.,	4th Wednesday Oct., 1894.
JOHN M. HALL,	" " "	" " " "
WILLIAM ROCKEFELLER,	New York, N. Y.,	" " " "
J. PIERPONT MORGAN,	" " "	" " " "
GEO. MACCULLOCH MILLER,	" " "	" " " "
WILLIAM E. BARNETT,	New Haven, Conn.,	" " " "
S. E. MERWIN,	" " "	" " " "
ALEXANDER MCNEIL,	New York, N. Y.,	" " " "
J. DEMING PERKINS,	Litchfield, Conn.,	" " " "

Total number of stockholders at date of last election? 22.

Date of last meeting of stockholders for election of directors? 2d Wednesday of November, 1893.

Post-office address of general office? New Haven, Conn.

Post-office address of operating office? Litchfield, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed? Robert T. Bird, Chief Clerk, Litchfield, Conn.

Officers.

Title.	Name.	Location of Office.
President,	CHARLES P. CLARK,	New Haven, Conn.
First Vice-President,	JOHN M. HALL,	" " "
Secretary,	WILLIAM E. BARNETT,	" " "
Treasurer,	PHILIP P. HUBBARD,	Litchfield, Conn.
Chief Clerk,	ROBERT T. BIRD,	" "
General Manager,	C. H. PLATT,	New Haven, Conn.

Officers.—Continued.

Title.	Name.	Location of Office.
Superintendent,	J. E. MARTIN,	Litchfield, Conn.
General Freight Agent,	" "	" "
General Passenger Agent,	" "	" "
General Ticket Agent,	" "	" "
General Baggage Agent,	" "	" "
Auditing Committee,	CHARLES P. CLARK,	New Haven, Conn.
" "	JOHN M. HALL,	" " "
" "	C. H. PLATT,	" " "

Property Operated.

Name of every Railroad the operations of which are included in the Income Account (p. 339):

Name.	TERMINALS.		Miles of Line for each Road Named.	Miles of Line for each Class of Roads Named.
	From—	To—		
Shepaug, Litchfield & Northern, Bethel Branch of the Danbury Div'n of the N. Y., N. H. & H. R. R. Co.	Litchfield, Ct.	Hawleyville, Ct.	32.28	32.28
	Hawleyville, Ct.	Bethel, Ct.	5.95	5.95
Total,			38.23	38.23

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Capital Stock — Common,	12,000	\$50.00	\$600,000.00	\$599,850.00
To be issued on surrender of bonds,				150.00
Total,	12,000	\$50.00	\$600,000.00	\$600,000.00

Manner of Payment for Capital Stock.	Total No. Shares Issued and Outstanding.
*Issued for reorganization: Common,	11,997
†To be issued,	3
Total,	12,000

* Exchanged for bonds of the Shepaug Valley Railroad Co., \$150 of stock for each \$100 of bonds.

† To be exchanged for bonds of the Shepaug Valley Railroad Co., \$150 of stock for each \$100 of bonds.

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	INTEREST.	
	Date of Issue.	When Due.		Rate.	When Payable.
First Mortgage,	1890	1930	\$300,000.00	5 per ct.	May 1 & Nov. 1.

Current Assets and Liabilities.

Cash and Current Assets Available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$3,250.27 Due from Agents, 4,585.19 Net Traffic Balances due from other Companies, 294.61 Due from Solvent Companies and Individuals, 1,167.47 Total — Cash & Cur. Ass'ts, \$9,297.54 Total, \$9,297.54	Audited Vouchers and Accts., \$3,715.03 Wages and Salaries, 694.62 Total — Current Liabilities, \$4,409.65 Balance — Cash Assets, . . . 4,887.89 Total, \$9,297.54

NOTE.—This company has on hand approximately 500 tons old iron rail, same not reckoned as an asset.

Recapitulation.

a. For mileage owned by road making this report :

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 336),	\$600,000.00	\$600,000.00	32.28	\$18,587.36
Liabilities (p. 337), .	4,409.65	4,409.65	32.28	136.60
Total,	\$604,409.65	\$604,409.65	32.28	\$18,723.96

Recapitulation.—Continued.

b. For mileage operated by road making this report (trackage rights excluded), the operations of which are included in the Income Account (p. 339):

Name of Road.	Capital Stock.	Current Liabilities.	Total.	AMOUNT PER MILE OF LINE.	
				Miles.	Amount.
Shepaug, Litchfield & Northern R. R.,	\$600,000.00	\$4,409.65	\$604,409.65	32.28	\$18,723.96

(This Company also operates the Bethel Branch of the Danbury Division of the N. Y., N. H. & H. R. R. Co.—It is 5.95 miles long.)

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction:			
Real Estate,	\$1,101.75	\$1,101.75	\$34.13
Grading, Bridge and Culvert Masonry,	5,860.04	5,860.04	181.54
Rails,	8,259.99	8,259.99	255.88
Buildings, Furniture, and Fixtures,	8,975.94	8,975.94	278.08
Shop Machinery and Tools,	22.16	22.16	.68
Engineering Expenses,	2,467.38	2,467.38	76.43
Sidings and Yard Extensions,	431.52	431.52	13.37
Purchase of constructed road in reorganization,	578,000.00	578,000.00	17,905.82
Total Construction,	\$605,118.78	\$605,118.78	\$18,745.93
Equipment:			
Locomotives,	\$16,700.00	\$16,700.00	\$517.35
Passenger Cars,	11,510.81	11,510.81	356.59
Baggage, Express, and Postal Cars,	500.00	500.00	15.49
Combination Cars,	3,000.00	3,000.00	92.94
Freight Cars, \$197.85,*	13,908.31	*13,710.46	424.73
Total Equipment,	\$45,619.12	\$45,421.27	\$1,407.10
Total Cost Construction, Equipment, etc.,	\$650,737.90	\$650,540.05	\$20,153.03

* During fiscal year one of this company's flat cars was wrecked on Pennsylvania Railroad. The amount collected, viz.: \$197.85, is credited to equipment, the original cost of the car being represented by that account.

Income Account.

Gross Earnings from Operation (p. 339),	\$73,226.24	
Less Operating Expenses (p. 341),	72,263.25	
Income from Operation,		\$962.99
Miscellaneous Income, less Expenses (p. 340),	296.67	
Income from other sources,		296.67
Total Income,		\$1,259.66
Rents paid for lease of road (p. 341),	1.00	
Taxes,	607.40	
Total Deduction from Income,		608.40
Net Income,		\$651.26
Surplus from Operations of Year ending June 30, 1894,		651.26
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],		\$54,776.68
Surplus on June 30, 1894 [for entry on "General Balance Sheet," p. 341],		\$55,427.94

Earnings from Operation.

Item.	Total Receipts.	Deductions, Account of Re- payments, etc.	Actual Earnings.
Passenger: Passenger Revenue,	\$24,542.56		
Total Passenger Revenue,			\$24,542.56
Mail,			2,684.66
Express,			2,000.00
Total Passenger Earnings,			\$29,227.22
Freight: Freight Revenue,	45,111.06		
Overcharge to shippers,		314.17	
Other repayments,		925.68	
Total Deductions,		\$1,239.85	
Total Freight Revenue,			\$43,871.21
Total Freight Earnings,			43,871.21
Total Passenger and Freight Earnings,			73,098.43
Telegraph companies and Telephone,			127.81
Total Other Earnings,			127.81
Total Gross Earnings from Operation, } — Entire Line,			\$73,226.24

Miscellaneous Income.

Item.	Gross Income.	Net Miscellaneous Income.
Rent of coal and lumber yard, . . .	\$296.67	\$296.67

Operating Expenses.

Item.	Amount.
Maintenance of Way and Structures :	
Repairs of Roadway,	\$16,507.87
Renewals of Rails,	9,337.20
Renewals of Ties,	4,438.38
Repairs of Bridges and Culverts,	9,998.36
Repairs of Fences, Road-crossings, Signs, and Cattle Guards,	381.60
Repairs of Buildings,	342.30
Repairs of Telegraph,	8.97
Total,	\$41,014.68
Maintenance of Equipment :	
Repairs and renewals of Locomotives,	1,707.33
Repairs and renewals of Passenger Cars,	2,005.88
Repairs and renewals of Freight Cars,	991.13
Shop Machinery, Tools, etc.,	22.56
Total,	\$4,726.90
Conducting Transportation :	
Wages of Enginemen, Firemen, and Roundhousemen,	4,519.63
Fuel for Locomotives,	5,675.06
Water-supply for Locomotives,	190.00
All other supplies for Locomotives,	225.13
Wages of other Trainmen,	4,751.96
All other train supplies,	167.94
Expenses of Telegraph and Telephone,	159.53
Wages of Station Agents, Clerks, and Laborers,	4,093.45
Station supplies,	567.78
Car Mileage—Balance,	134.17
Loss and Damage,	254.24
Total,	\$20,738.89
General Expenses:	
Salaries of Officers,	3,538.80
Salaries of Clerks,	601.72
General Office Expenses and Supplies,	99.90
Advertising,	80.12
Insurance,	320.68
Legal Expenses,	100.00
Stationery and Printing,	509.44
Other General Expenses,	532.12
Total,	\$5,782.78

Operating Expenses.—Continued.

Item.	Amount.
Recapitulation of Expenses:	
Maintenance of Way and Structures,	\$41,014.68
Maintenance of Equipment,	4,726.90
Conducting Transportation,	20,738.89
General Expenses,	5,782.78
Grand Total,	\$72,263.25
Percentage of Expenses to Earnings, Entire Line, 98.69.	

Rentals Paid.

Rents paid for lease of road:

Name of Road.	Total Cash.
Bethel Branch of the Danbury Div. of the N. Y., N. H. & H. R. R. Co.: Nominal rent per year,	\$1.00

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Decrease Year ending June 30, 1894.
\$605,118.78	Cost of Road (p. 338),	\$605,118.78	.....
45,619.12	Cost of Equipment (p. 338),	45,421.27	\$197.85
10,004.45	Cash & Current Assets (p. 337),	9,297.54	706.91
\$660,742.35	Grand Total,	\$659,837.59	\$904.76

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$600,000.00	Capital Stock (p. 336),	\$600,000.00	.....	.....
5,965.67	Current Liabilities (p. 337),	4,409.65	.....	\$1,556.02
54,776.68	Profit and Loss,	55,427.94	\$651.26	.....
\$660,742.35	Grand Total,	\$659,837.59	.....	(net) \$904.76

Important Changes During the Year.

During the fiscal year this Company replaced three (3) wooden trestles with three (3) iron girder bridges, upon substantial stone abutments, at a cost of \$10,110.01, and purchased 603.80 tons steel rail and fastenings to complete its line with steel to Litchfield, at a cost of \$9,819.47. The total cost of both are included in operating expenses.

Contracts, Agreements, etc.

Adams Express Co.—They have control of the entire express business of this line at a flat rental of \$2,000.00 per year.

United States Post-office Department.—No contract, revenue based on weight of mails.

The Western Union Telegraph Company own and operate this wire. Said Telegraph Company transacts all our business to a certain maximum amount, this Company paying 50 per cent. of excess.

The Southern New England Telephone Co.—Contract reads "for the exchange of certain privileges this Company is charged half-rates for telephone rentals.

This Company operates since December 11, 1892, a certain piece of track known as the Bethel Branch of the Danbury Division, of the New York, New Haven & Hartford Railroad Company, between Hawleyville & Bethel, a distance of 5.95 miles under contract for the revenue.

Employees and Salaries.

Class.	Number.	Total No of Days Worked.	Total Yearly Compensation.	Av. Daily Compensation.
General Officers, four under Salary, .	7	936	\$3,538.80	\$3.78
Other Officers,	1	312	1,198.08	3.84
General Office Clerks,	1	364	601.72	1.65
Other Employees:				
Station Agents,	8	2,912	3,462.56	1.19
Other Station Men,	3	973	511.84	.53
Enginemen,	3	988	2,877.68	2.91
Firemen,	2	649	1,148.50	1.77
Conductors,	2	669	1,838.82	2.75
Other Trainmen,	5	1,623	2,890.46	1.78
Machinists,	1	312	1,198.08	3.84
Carpenters,	1	314	706.70	2.25
Other Shopmen,	1	310	511.73	1.65
Section Foremen,	6	1,864	3,578.88	1.92
Other Trackmen,	29	7,089	10,633.50	1.50
Switchmen, Flagmen, and Watchmen, .	2	804	1,190.66	1.48
All other Employes and Laborers, .	1	93	220.41	2.37
Total (including "General Officers"),	73	20,212	36,108.42	\$1.79
Less "General Officers,"	7	936	3,538.80	3.78
Total (excluding "General Officers"),	66	19,276	32,569.62	\$1.69
Distribution of above:				
General Administration,	7	936	3,538.80	3.78
Maintenance of Way and Structures, .	37	9,358	15,630.87	1.67
Maintenance of Equipment,	3	936	2,416.51	2.58
Conducting Transportation,	26	8,982	14,522.24	1.62
Total (including "General Officers"),	73	20,212	36,108.42	\$1.79
Less "General Officers,"	7	936	3,538.80	3.78
Total (excluding "General Officers"),	66	19,276	32,569.62	1.69
Total (including "General Officers"— Entire Line, }	73	20,212	36,108.42	\$1.79

Passenger, Freight, and Train Mileage, entire Line.

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	29,042			
Number of passengers carried one mile,	657,197			
No. of pass. carried one mile per mile of road,	17,191			
Average distance carried,	22.63			
Total passenger revenue,		24,542	56	
Av. amount received from each passenger,			84	5.07
Average receipts per passenger per mile,			03	7.34
Total passenger earnings,		29,227	22	
Passenger earnings per mile of road,		764	51	
Passenger earnings per train mile (44,227 m.),			66	0.85
Freight Traffic:				
No. of tons carried of frt. earning revenue,	40,549			
Number of tons carried one mile,	840,512			
No. of tons carried one mile per mile of road,	21,986			
Average distance haul of one ton,	20.73			
Total freight revenue,		43,871	21	
Av. amount received for each ton of freight,		1	08	1.93
Average receipts per ton per mile,			05	2.20
Total freight earnings,		43,871	21	
Freight earnings per mile of road,		1,147	56	
Freight earnings per train mile (24,324 m.),		1	80	3.62
Passenger and Freight:				
Passenger and freight revenue,		68,413	77	
Pass. and freight revenue per mile of road,		1,789	53	
Passenger and freight earnings,		73,098	43	
Pass. and freight earnings per mile of road,		1,912	07	
Gross earnings from operation,		73,226	24	
Gross earnings from operation per m. of road,		1,915	41	
do. do. per train mile (68,551 m.),		1	06	8.20
Operating expenses,		72,263	25	
Operating expenses per mile of road,		1,890	22	
Operating expenses per train mile (68,551 m.),		1	05	4.15
Income from operation,		962	99	
Income from operation per mile of road,		25	19	
Train Mileage:				
Miles run by passenger trains,	36,355			
Miles run by freight trains,	710			
Miles run by mixed trains,	31,486			
Total Mileage Trains Earning Revenue,	68,551			
Miles run by construction and other trains,	6,440			
Grand Total Train Mileage,	74,991			
Mileage of loaded freight cars—North,	54,075			
Mileage of loaded freight cars—South,	50,690			
Mileage of empty freight cars—North,	30,685			
Mileage of empty freight cars—South,	46,027			
Average number of freight cars in train,	12.10			
Average number of loaded cars in train,	6.55			
Average number of empty cars in train,	5.55			
Average number of tons of freight in train,	57.59			
Av. No. of tons of freight in each loaded car,	8.78			

NOTE.—Ten miles per day allowed for freight train switching, and four miles for passenger.

Freight Traffic Movement.

Commodity.	Freight Originating on this Road.	Freight Received from Con- necting Roads and other Carriers.	TOTAL FREIGHT TONNAGE.	
			Whole Tons.	Per Ct.
Products of Agriculture:				
Grain,	103	4,510	4,613	11.38
Flour,	43	349	392	00.97
Fruit and Vegetables,	173	403	576	01.42
Products of Animals:				
Live Stock,	24	171	195	00.48
Dressed Meats,	84	342	426	01.05
Milk,	8,448	.....	8,448	20.83
Products of Mines:				
Anthracite Coal, . . . . .	.....	5,657	5,657	13.95
Stone,	10,761	675	11,436	28.20
Products of Forest:				
Lumber,	1,589	1,042	2,631	06.49
Manufactures:				
Petroleum and other oils, . . . . .	.....	280	280	00.69
Gen'l Mfs.,	843	912	1,755	04.33
Cement, Brick, Lime and Sand,	927	1,127	2,054	05.07
Wines, Liquors, and Beers, . . . . .	.....	257	257	00.63
Merchandise:	375	746	1,121	02.76
Miscellaneous:				
Other commodities not mentioned above,	235	473	708	01.75
Total Tonnage,	23,605	16,944	40,549	100.00
Total Tonnage—Entire Line,	23,605	16,944	40,549	100.00

Description of Equipment.

Item.	Total No. at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
		No.	Name.	No.	Name.
Locomotives—Owned and Leased:					
Passenger,	2	3	Eames Vacuum.	.....	.....
Freight,	2	1	Westinghouse.	.....	.....
Total Locomotives in Service,	4	4	.....	.....	.....
Cars—Owned and Leased:					
In Passenger Service—					
First-class Cars,	3	{ 2	Westinghouse Auto.	} 3	Miller.
		{ 1	W'ghouse & Eames Vacuum.		
Combination Cars,	2	{ 1	West. Pipe & Eames Vacuum.	} 2	Miller Hook
		{ 1	Eames Vac. & Westinghouse Aut. Br.		
Baggage, Express, and Postal Cars,	{ 1	{ 1	Leader pipe for West. & Eames Vacuum.	{ 1	Miller.
Total,	6	6	.....	.....	.....
In Freight Service—					
Flat Cars (63 wrecked Oct. 6, 1893),	37	....	None.	.....	None.
Other Cars,	4	4	Leader Pipes.	4	Miller.
Total,	41	....	.....	.....	.....
In Company's Service—					
Caboose Cars,	1	....	None.	.....	None.
Total Cars in Service,	48	....	.....	.....	.....
Total Cars Owned,	48	....	.....	.....	.....

Mileage.

a. MILEAGE OF ROAD OPERATED (ALL TRACKS).

Line in use.	Line Represented by Capital Stock. Main Line.	Line Operated under Contract, etc.	Total Mileage Operated.	Iron Rails.	Steel Rails.
Miles of single track, . . .	32.28	5.95	38.23	.54	37.69
Miles of yard track and sidings,	3.21	.93	4.14	3.93	.21
Total,	35.49	6.88	42.37	4.47	37.90

b. MILEAGE OF LINE OPERATED BY STATES AND TERRITORIES (SINGLE TRACK).

State or Territory.	Line Represented by Capital Stock. Main Line.	Line Operated under Contract, etc.	Total Mileage Operated.	Iron Rails.	Steel Rails.
Connecticut,	32.28	5.95	38.23	.54	37.69

c. MILEAGE OF LINE OWNED BY STATES AND TERRITORIES (SINGLE TRACK).

State or Territory.	Line Represented by Capital Stock. Main Line.	Total Mileage Owned.	Iron Rails.	Steel Rails.
Connecticut,	32.28	32.28	.54	31.74

Renewals of Rails and Ties.

NEW RAILS LAID DURING YEAR.

Kind.	Tons.	Weight per Yard.	Average price per ton at distributing point.
Steel,	468	74 lbs.	\$15.00

Renewals of Rails and Ties.—*Continued.*

NEW TIES LAID DURING YEAR.

Kind.	Number.	Average price at distributing point.
1st class,	13,528	36.50 cts.
2d class,	324	20.00 “
Bridge and Switch Ties,	718	55.37 “
Total,	14,570	37.06 cts.

Consumption of Fuel by Locomotives.

Locomotives.	COAL—TONS.		WOOD—CORDS.		Total Fuel Consumed—Tons.	Miles Run.	Average pounds consumed per Mile.
	Anthracite.	Bituminous.	Hard Cords.	Tons.			
Passenger,		681.42	580=	386	685.28	36,355	37.70
Freight,		850.93	724=	483	855.76	32,196	53.16
Construction,		171.21	146=	97	172.18	6,440	53.47
Total,		1,703.56	1,450	966	1,713.22	74,991	45.69

Average cost at distributing point: Bituminous Coal, \$3.25; Hard Wood per cord, \$2.75, per ton, \$4.12; Total, \$3.25.

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
			Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
From—	To—	Miles.			
Litchfield, Ct.,	Hawleyville, Ct.	32.28	138	14.56	17.72
Hawleyville, “	Bethel, “	5.95	No	available	record.
Total,		38.23	138	14.56	17.72

PROFILE.

No available record.

Characteristics of Road.—Continued.

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges:							
Stone,	2	27	..	13	6	13	6
Iron,	10	1,019	..	29	6	450	..
Wooden,	20	366	..	11	..	43	..
Combination,	1	45	..	45	..	45	..
Total,	33	1,457	..	..	..	..	..
Trestles,	6	264	..	21	..	84	..
Tunnels,	1	120	..	..	..	..	..

OVERHEAD HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings: Bridges,	1	17	8

GAUGE OF TRACK—4 feet, 8½ inches; 32.28 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
38.23	38.23	Western Union Telegraph Co.	Western Union Telegraph Co.

Car Mileage.

Individuals, Co-operative Fast Freight Lines, and Stock Companies, to which the Company making this report pays mileage for the use of cars:

Atlantic Coast Line.	Merchants Despt. & Trans. Co.
Armour & Co.	National Despatch Line.
Armour Refrigerator Line.	New England Car Co.
Blue Line.	Red Line.
Burton Stock Line.	Southern Iron Car Co.
Canada Southern Line.	Seaboard Air Line.
Erie Despatch Line.	Union Tank Line.
Empire Line.	White Line.
Midland Line.	

Oath.

STATE OF CONNECTICUT, }
COUNTY OF NEW HAVEN, } ss.

We, the undersigned, Charles P. Clark, President, and Robert T. Bird, Chief Clerk of the Shepaug, Litchfield & Northern Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

CHARLES P. CLARK,
President.

ROBT. T. BIRD,
Chief Clerk.

Subscribed and sworn to before me this 12th day of September, 1894.

AVERY CLARK, *Notary Public.*

SHORE LINE RAILWAY.

History.

Name of common carrier making this report? Shore Line Railway.

Date of organization? March 15, 1865.

Under laws of what Government, State, or Territory? Chartered by State of Connecticut, May session, 1864.

If a reorganized company, give name of original corporation, and refer to laws under which it was organized. New Haven & New London Railroad Company. Laws of the State of Connecticut.

What carrier operates the road of this Company? New York, New Haven & Hartford Railroad Company.

Organization.

Name of Directors.	Post-Office Address.	Expiration of Term.
EZEKIEL H. TROWBRIDGE,	New Haven, Conn.,	Died Nov. 24, 1893.
HENRY L. HOTCHKISS,	" " "	June, 1895.
WILBUR F. DAY,	" " "	" "
WM. T. BARTLETT,	" " "	" "
ARTHUR D. OSBORNE,	" " "	" "
E. HAYES TROWBRIDGE, JR.,	" " "	" "
CHARLES P. CLARK,	" " "	" "
JAMES M. TOWNSEND,	" " "	" "

Total number of stockholders at date of last election? 93.

Date of last meeting of stockholders for election of directors? June 7, 1894.

Post-office address of Lessor office? W. L. Squire, Treasurer, New Haven, Conn.

Post-office address of operating office? New York, New Haven & Hartford Railroad Company, New Haven, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed? W. L. Squire, Treasurer, New Haven, Conn.

Officers.

Title.	Name.	Location of Office.
President,	EZEKIEL H. TROWBRIDGE, to date of death, Nov. 24, '93.	
First Vice-President,	E. HAYES TROWBRIDGE, JR.,	New Haven, Conn.
President,	E. HAYES TROWBRIDGE, elected President June 7, 1894.	
Vice-President,	CHARLES P. CLARK, elected Vice-President June 7, 1894.	
Secretary,	WM. E. BARNETT,	New Haven, Conn.
Treasurer,	WM. L. SQUIRE,	" "

Property Leased or Otherwise Assigned for Operation.

Name of Railroad the income of which from lease or from other assignment for operation, is included in the Income Account (p. 353):

Name.	TERMINALS.		By what Company Operated.	Under what kind of Contract Operated.	Miles of Line.
	From—	To—			
Shore Line Railway.	New Haven	New London.	New York, New Haven & Hartford R. R. Co.	Perpetual Lease.	48.53

Contract Existing between this Road and the Company by which it is Operated.

The Shore Line Railway is leased in perpetuity to The New York, New Haven & Hartford Railroad Co. at an annual rental of \$100,000, payable to said Shore Line Railway, one-half on the first Tuesday of January and one-half on the first Tuesday in July in each year.

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.	DIVIDENDS DECLARED DURING YEAR.	
					Rate.	Amount.
Common,	10,000	\$100.00	\$1,000,000	\$1,000,000.00	7½ per ct.	\$72,500.00

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash, Common,	628 ⁴⁵² / ₁₀₀₀	\$62,845.20
Issued for First Mortgage Bonds of New Haven & New London R. R. Co.,	6,781 ²⁵⁰ / ₁₀₀₀	
Issued for increased valuation of road,	2,590 ²⁹⁸ / ₁₀₀₀	
Total,	10,000	\$62,845.20

Funded Debt.

Class of Bond or Obligation.	TIME.		Amount of Authorized Issue.	Amount Issued.	Amount Outstanding.	Cash Realized on Amount Issued.
	Date of Issue.	When Due.				
1st Mtge. Bds.,	1880	1910	\$200,000.00	\$200,000.00	\$200,000.00	\$201,000.00

INTEREST.

Rate.	When Payable.	Amount Accrued during Year.	Amount Paid during Year.
4½ per cent.	March and September.	\$9,000.00	\$9,000.00

Recapitulation of Funded Debt.

Class of Debt.	Amount Issued.	Amount Outstanding.	INTEREST.	
			Amount Accrued during Year.	Amount Paid during Year.
Mort. Bonds (p. 352),	\$200,000.00	\$200,000.00	\$9,000.00	\$9,000.00

Current Assets and Liabilities.

Cash and Current Assets available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Cash, \$85.47	Loans and Bills Payable, \$1,000.00
Balance, Current Liabilities, 914.53	
Total, \$1,000.00	Total, \$1,000.00

Recapitulation.

For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 351),	\$1,000,000.00	\$1,000,000.00	48.53	\$20,605.81
Bonds (p. 352),	200,000.00	200,000.00	48.53	4,121.16
Total, . . .	\$1,200,000.00	\$1,200,000.00	48.53	\$24,726.97

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Total Construction,	\$1,169,496.10	\$1,169,496.10	\$24,098.42

Income Account.

Income from lease of road,	\$100,000.00
Total Income,	\$100,000.00
Deductions from Income:	
Salaries and Maintenance of Organization,	\$68.25
Interest on Funded Debt accrued (p. 352),	9,000.00
Taxes,	17,000.00
Total Deduction from Income,	\$26,068.25
Net Income,	\$73,931.75
Dividends, 7½ per cent., common stock (p. 351),	\$72,500.00
Total,	72,500.00
Surplus from Operations of Year ending June 30, 1894,	\$1,431.75
Deficit on June 30, 1893 [from "General Balance Sheet," 1893 Report],	32,850.18
Deficit on June 30, 1894, [for entry on "General Balance Sheet"],	\$31,418.43

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Decrease Year ending June 30, 1894.
\$1,169,496.10	Cost of Road (p. 353),	\$1,169,496.10	
1,453.73	Cash and Current Assets (p. 352), . .	85.47	\$1,368.25
32,850.18	Profit and Loss,	31,418.43	1,431.75
\$1,203,800.00	Grand Total,	\$1,201,000.00	\$2,800.00

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Decrease, Year ending June 30, 1894.
\$1,000,000.00	Capital Stock (p. 351),	\$1,000,000.00	
200,000.00	Funded Debt (p. 352),	200,000.00	
3,800.00	Current Liabilities,	1,000.00	\$2,800.00
\$1,203,800.00	Grand Total,	\$1,201,000.00	\$2,800.00

Security for Funded Debt (p. 220).

Class of Bond or Obligation.	WHAT ROAD MORTGAGED.			Amount of Mortgage per Mile of Line.
	From—	To—	Miles.	
First Mortgage,	New Haven	New London.	48.53	\$4,121.16

Mileage.

Mileage owned by States and Territories.

State or Territory.	Line Represented by Capital Stock. Main Line.	Total Mileage Owned.	Steel Rails.
Connecticut,	48.53	48.53	48.53

Characteristics of Road.

WORKING DIVISIONS OR BRANCHES.			ALIGNMENT.		
From—	To—	Miles.	Number of Curves.	Aggregate Length of Curved Line. Miles.	Length of Straight Line. Miles.
New Haven,	New London.	48.53	65	19.00	29.53

PROFILE.

Length of Level Line. Miles.	ASCENDING GRADES.			DESCENDING GRADES.		
	No.	Sum of Ascents. Feet.	Aggregate Length of Ascending Grades. Miles.	No.	Sum of Descents. Feet.	Aggregate Length of Descending Grades. Miles.
8.83	41	518	18.96	38	532	20.74

BRIDGES, TRESTLES, TUNNELS, ETC.

Item.	Number.	AGGREGATE LENGTH.		MINIMUM LENGTH.		MAXIMUM LENGTH.	
		Feet.	Inches.	Feet.	Inches.	Feet.	Inches.
Bridges: Stone,	5	115	..	10	..	45	..
Iron, .	36	3,244	..	15	..	1,124	..
Wooden, .	9	1,501	..	10	..	1,314	..
Total, .	50	4,860	..	..	..	..	..
Trestles, .	12	3,215	..	85	..	779	..

OVERHEAD CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings: Bridges,	24	14	6

GAUGE OF TRACK — 4 feet, 8½ inches; 48.53 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Name of Owner.	Name of Operating Company.
48.53	Western Union Telegraph Co.	Western Union Telegraph Co.

Oath.

STATES OF NEW HAMPSHIRE AND CONNECTICUT, }
COUNTIES OF GRAFTON AND NEW HAVEN, } ss.

We, the undersigned, E. Hayes Trowbridge, President, and Wm. L. Squire, Treasurer, of the Shore Line Railway Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

E. HAYES TROWBRIDGE,
President.

W. L. SQUIRE,
Treasurer.

Subscribed and sworn to by E. Hayes Trowbridge before me this 1st day of September, 1894.

C. H. GREENLEAF,
Notary Public for New Hampshire.

Subscribed and sworn to by W. L. Squire before me this 29th day of August, 1894.

A. S. MAY,
Notary Public, New Haven, Conn.

SOUTH MANCHESTER RAILROAD CO.

History.

Name of common carrier making this report? South Manchester Railroad Company.

Date of organization? May Session, 1866.

Under laws of what Government, State, or Territory organized? State of Connecticut.

Organization.

Name of Directors.	Post-office Address.	Expiration of Term.
RALPH CHENEY,	South Manchester, Conn.,	Until successor is appointed.
FRANK CHENEY,	" "	" " "
F. W. CHENEY,	" "	" " "
RICHARD O. CHENEY,	" "	" " "

Total number of stockholders at date of last election? 9.

Date of last meeting of stockholders for election of directors? January 25, 1869.

Post-office address of general office. South Manchester, Conn.

Post-office address of operating office. South Manchester, Conn.

Name and address of officer to whom correspondence regarding this report should be addressed. Richard O. Cheney, Secretary and General Manager, South Manchester, Conn.

Officers.

Title.	Name.	Location of Office.
President,	F. W. CHENEY,	South Manchester, Conn.
Secretary,	RICHARD O. CHENEY,	" "
Treasurer,	CHARLES S. CHENEY,	" "
Attorney,	OLIN R. WOOD,	Manchester, "
General Manager,	RICHARD O. CHENEY,	South Manchester, Conn.
General Freight Agent,	CHARLES S. CHENEY,	" "

Property Operated.

Name of every Railroad the operations of which are included in the Income Account (p. 359):

Name.	TERMINALS.		Miles of Line for each Road Named.
	From—	To—	
South Manchester Railroad,	So. Manchester,	Manchester.	2.25

Capital Stock.

Description.	Number of Shares Authorized.	Par Value of Shares.	Total Par Value Authorized.	Total Amount Issued and Outstanding.
Common,	400	\$100.00	\$40,000.00	\$40,000.00

Manner of Payment for Capital Stock.	Total Number Shares Issued and Outstanding.	Total Cash Realized.
Issued for Cash: Common,	400	\$40,000.00

Current Assets and Liabilities.

Cash and Current Assets available for Payment of Current Liabilities.	Current Liabilities Accrued to and Including June 30, 1894.
Balance—Current Liabilities, \$12,568.52	Loans and Bills Payable, \$12,568.52

Materials and Supplies on hand, \$3,087.95.

Recapitulation.

a. For mileage owned by road making this report:

Account.	Total Amount Outstanding.	Apportionment to Railroads.	AMOUNT PER MILE OF LINE.	
			Miles.	Amount.
Capital Stock (p. 358),	\$40,000.00	\$40,000.00	2.25	\$17,777.77
Current Liab. (p. 358),	12,568.52	12,568.52	2.25	5,586.09
Total,	\$52,568.52	\$52,568.52	2.25	\$23,363.86

b. For mileage operated by road making this report (trackage rights excluded), the operations of which are included in the income account (p. 359):

Name of Road.	Capital Stock.	Current Liabilities.	Total.	AMOUNT PER MILE OF LINE.	
				Miles.	Amount.
South Manchester R. R.,	\$40,000.00	\$12,568.52	\$52,568.52	2.25	\$23,363.86

Cost of Road, Equipment, and Permanent Improvements.

Item.	Total Cost to June 30, 1893.	Total Cost to June 30, 1894.	Cost per Mile.
Construction,	\$80,838.00	\$80,838.00	\$35,928.00
Equipment,	25,817.92	25,817.92	11,474.63
Total Cost Construction, Equip- ment, etc., }	\$106,655.92	\$106,655.92	\$47,402.63

Income Account.

Gross Earnings from Operation (p. 359),	\$14,893.43	
Less Operating Expenses (p. 360),	14,473.69	
Income from Operation,		\$419.74
Deductions from Income:		
Taxes,	294.16	
Total Deductions from Income,		294.16
Net Income,		\$125.58
Surplus from Operations of Year ending June 30, 1894,		\$125.58
Surplus on June 30, 1893 [from "General Balance Sheet," 1893 Report],		57,049.77
Surplus on June 30, 1894 [for entry on "General Balance Sheet"] (p. 361),		\$57,175.35

Earnings from Operation.

Item.	Actual Earnings.
Passenger: Total Passenger Revenue,	\$7,843.01
Express,	75.00
Extra Baggage and Storage,	48.30
Total Passenger Earnings,	\$7,966.31
Total Freight Earnings,	6,927.12
Passenger and Freight Earnings,	\$14,893.43
Total Gross Earnings from Operation—Entire Line,	\$14,893.43

Operating Expenses.

Item.	Amount.
Maintenance of Way and Structures:	
Repairs of Roadway,	\$3,191.89
Renewals of Ties,	218.80
Repairs of Bridges and Culverts,	40.70
Repairs of Fences, Road-crossings, Signs, and Cattle Guards,	16.38
Repairs of Buildings,	356.49
Total, .	\$3,824.26
Maintenance of Equipment:	
Repairs and Renewals of Locomotives,	234.56
Repairs and Renewals of Passenger Cars,	593.47
Shop Machinery, Tools, etc.,	14.24
Partial Heating of Passenger Cars,	20.00
Total, .	\$862.27
Conducting Transportation:	
Wages of Enginemen, Firemen, and Roundhouse men,	2,341.50
Fuel for Locomotives,	1,235.92
All other Supplies for Locomotives,	512.11
Wages of other Trainmen,	1,326.00
Wages of Switchmen, Flagmen, and Watchmen,	546.00
Wages of Station Agents, Clerks, and Laborers,	1,248.00
Station Supplies,	47.25
Heating of Roundhouse,	80.00
Total, .	\$7,336.78
General Expenses :	
Salaries of Clerks,	1,805.30
Insurance,	45.57
Stationery and Printing,	191.10
Other general expenses,	408.41
Total, .	\$2,450.38
Recapitulation of Expenses :	
Maintenance of Way and Structures,	3,824.26
Maintenance of Equipment,	862.27
Conducting Transportation,	7,336.78
General Expenses,	2,450.38
Grand Total, .	\$14,473.69
Percentage of Expenses to Earnings, Entire Line,	97.18

Comparative General Balance Sheet.

Total, June 30, 1893.	Assets.	Total, June 30, 1894.	Decrease Year ending June 30, 1894.
\$80,838.00	Cost of Road (p. 359), . . .	\$80,838.00	.....
25,817.92	Cost of Equipment (p. 359), . . .	25,817.92	.....
3,809.40	Materials and Supplies, . . .	3,087.95	\$721.45
\$110,465.32	Grand Total,	\$109,743.87	\$721.45

Total, June 30, 1893.	Liabilities.	Total, June 30, 1894.	Increase Year ending June 30, 1894.	Decrease Year ending June 30, 1894.
\$40,000.00	Capital Stock (p. 358),	\$40,000.00	.....	.....
13,415.55	Current Liabilities (p. 358),	12,568.52	.....	\$847.03
57,049.77	Profit and Loss,	57,175.35	\$125.58	.....
\$110,465.32	Grand Total,	\$109,743.87	\$125.58	\$847.03

Important Changes during the Year.

Decrease of Floating Debt, \$847.03

Employees and Salaries.

Class.	Num- ber.	Total No. of Days Worked.	Total Yearly Com- pensation.	Av. Daily Compen- sation.
Station Agent and Conductor,	1	313	\$1,259.30	\$4.02
Other Station Men, Asst. Freight Agent and Assistant,	2	626	1,248.00	1.99
Enginemen,	2	626	1,795.50	2.87
Firemen,	2	626	1,092.00	1.74
Other Trainmen,	2	626	1,324.50	2.12
Section Foremen,	1	313	939.00	3.00
Other Trackmen,	3	900	1,635.00	1.82
Switchmen, Flagmen, and Watchmen, .	1	365	547.50	1.50
Total,	14	4,395	\$9,840.80	\$2.24
Distribution of Above :				
Maintenance of Way and Structures, .	4	1,265	2,574.00	2.04
Conducting Transportation,	10	3,130	7,266.80	2.32
Total,	14	4,395	\$9,840.80	\$2.24

Passenger, Freight, and Train Mileage.

Item.	Tonnage, No. Passengers, No. Trains, Mileage, No. Cars.	REVENUE AND RATES.		
		Dollars.	Cts.	Mills.
Passenger Traffic:				
No. of passengers carried earning revenue,	109,884			
Number of passengers carried one mile,	247,126			
No. of pass. ca'rd one mile per mile of road,	247,126			
Average distance carried,	2.25			
Total passenger revenue,		7,843	01	
Av. amount received from each passenger,			07	1.41
Average receipts per passenger per mile,			03	1.74
Total passenger earnings,		7,966	31	
Passenger earnings per mile of road,		3,540	58	2
Passenger earnings per train mile,			45	9.81
Freight Traffic:				
No. of tons carried of freight earning rev.,	23,651			
Number of tons carried one mile,	53,215			
No. of tons ca'rd one mile per mile of road,	53,215			
Average distance haul of one ton,	2.25			
Total freight revenue,		6,927	12	
Av. amount received for each ton of freight,			29	2.89
Average receipts per ton per mile,			13	0.17
Total freight earnings,		6,927	12	
Freight earnings per mile of road,		3,078	72	
Freight earnings per train mile,		3	70	4.34
Passenger and Freight:				
Passenger and freight revenue,		14,770	13	
Pass. and freight revenue per mile of road,		6,564	50	9
Passenger and freight earnings,		14,893	43	
Pass. and freight earnings per mile of road,		6,619	30	2
Gross earnings from operation (p. 359),		14,893	43	
Gross earnings from operation per m. of road,		6,619	30	2
Gross earnings from operation per train mile,			77	5.91
Operating expenses (p. 360),		14,473	69	
Operating expenses per mile of road,		6,432	75	
Operating expenses per train mile,			75	4.03
Income from operation,		125	58	
Income from operation per mile of road,		55	81	3
Train Mileage:				
Miles run by passenger trains,	17,325			
Miles run by freight trains,	1,870			
Total Mileage Trains Earning Revenue,	19,195			
Grand Total Train Mileage,	19,195			
Mileage of loaded freight cars—North or East,	945			
Mileage of loaded freight cars—South or West,	2,557			
Mileage of empty freight cars—North or East,	1,616			
Average number of freight cars in train,	6.84			
Average number of loaded cars in train,	4.69			
Average number of empty cars in train,	2.15			
Average number of tons of freight in train,	31.62			
Av. No. of tons of freight in each loaded car,	6.75			

Freight Traffic Movement.
(Cannot give details of freight.)

Commodity.	Freight Originating on this Road.	Freight Received from Con- necting Roads and other Carriers.
	Whole Tons.	Whole Tons.
Miscellaneous: Total Tonnage,	2,262	21,389

Description of Equipment.

Item.	Total Number at end of Year.	EQUIPMENT FITTED WITH TRAIN BRAKE.		EQUIPMENT FITTED WITH AUTOMATIC COUPLER.	
		No.	Name.	No.	Name.
Total Locomotives in Service, .	2	2	Westinghouse.	..	.....
Total Combination Cars, . .	4	..	"	4	Miller.

Mileage.

a. MILEAGE OF ROAD OPERATED (ALL TRACKS).

Line in use.	Line Represented by Capital Stock. Main Line.	Total Mileage Operated.	Iron Rails.	Steel Rails.
Miles of single track,	2.25	2.25	....	2.25
Miles of yard track and sidings,	1.72	1.72	1.72	....
Total,	3.97	3.97	1.72	2.25

b. MILEAGE OF LINE BY STATES AND TERRITORIES.

Mileage owned and operated by road making this report:

State or Territory.	LINE REPRESENTED BY CAPITAL STOCK.		Iron Rails.	Steel Rails.
	Main Line.	Branches and Spurs.		
Connecticut,	2.25	1.72	1.72	2.25

Renewals of Rails and Ties.**NEW TIES LAID DURING YEAR.**

Kind.	Number.	Average Price at Distributing Point.
Chestnut,	547	40 cents.

Consumption of Fuel by Locomotives.

Locomotives.	Total. Bituminous Coal.—Tons.	Miles Run.	Average lbs. Consumed per Mile.
Passenger and Freight,	275	19,195	28.65

Average price at distributing point, \$5.00.

Accidents to Persons.*Killed — Trespassing, 1.*

Henry E. Howe of Buckingham, Conn. Walking on track, July 4, intoxicated; struck by locomotive and instantly killed. First accident of any kind on the road.

Characteristics of Road,**BRIDGES, TRESTLES, TUNNELS, ETC.**

Item.	Number.	Aggregate Length. Feet.	Minimum Length. Feet.	Maximum Length Feet.
Bridges: Iron,	2	38	18	20

HIGHWAY CROSSINGS.

Item.	Number.	HEIGHT OF LOWEST ABOVE SURFACE OF RAIL.	
		Feet.	Inches.
Overhead Highway Crossings: Bridges,	1	19	10

GAUGE OF TRACK—4 feet, 8 $\frac{1}{4}$ inches; 2.25 miles.

Telegraph.

Owned by another company, but located on property of road making this report:

Miles of Line.	Miles of Wire.	Name of Owner.	Name of Operating Company.
2.25	6.75	Cheney Brothers.	Cheney Brothers.

Oath.

STATE OF CONNECTICUT, }
COUNTY OF HARTFORD, } ss.

We, the undersigned, F. W. Cheney, President, and Charles S. Cheney, Treasurer of the South Manchester Railroad Company, on our oath do severally say that the foregoing return has been prepared, under our direction, from the original books, papers, and records of said Company; that we have carefully examined the same, and declare the same to be a complete and correct statement of the business and affairs of said Company in respect to each and every matter and thing therein set forth, to the best of our knowledge, information, and belief; and we further say that no deductions were made before stating the gross earnings or receipts herein set forth, except those shown in the foregoing accounts; and that the accounts and figures contained in the foregoing return embrace all of the financial operations of said Company during the period for which said return is made.

F. W. CHENEY,
President.

CHARLES S. CHENEY,
Treasurer.

Subscribed and sworn to before me this 12th day of September, 1894.

RICHARD O. CHENEY,
Notary Public.

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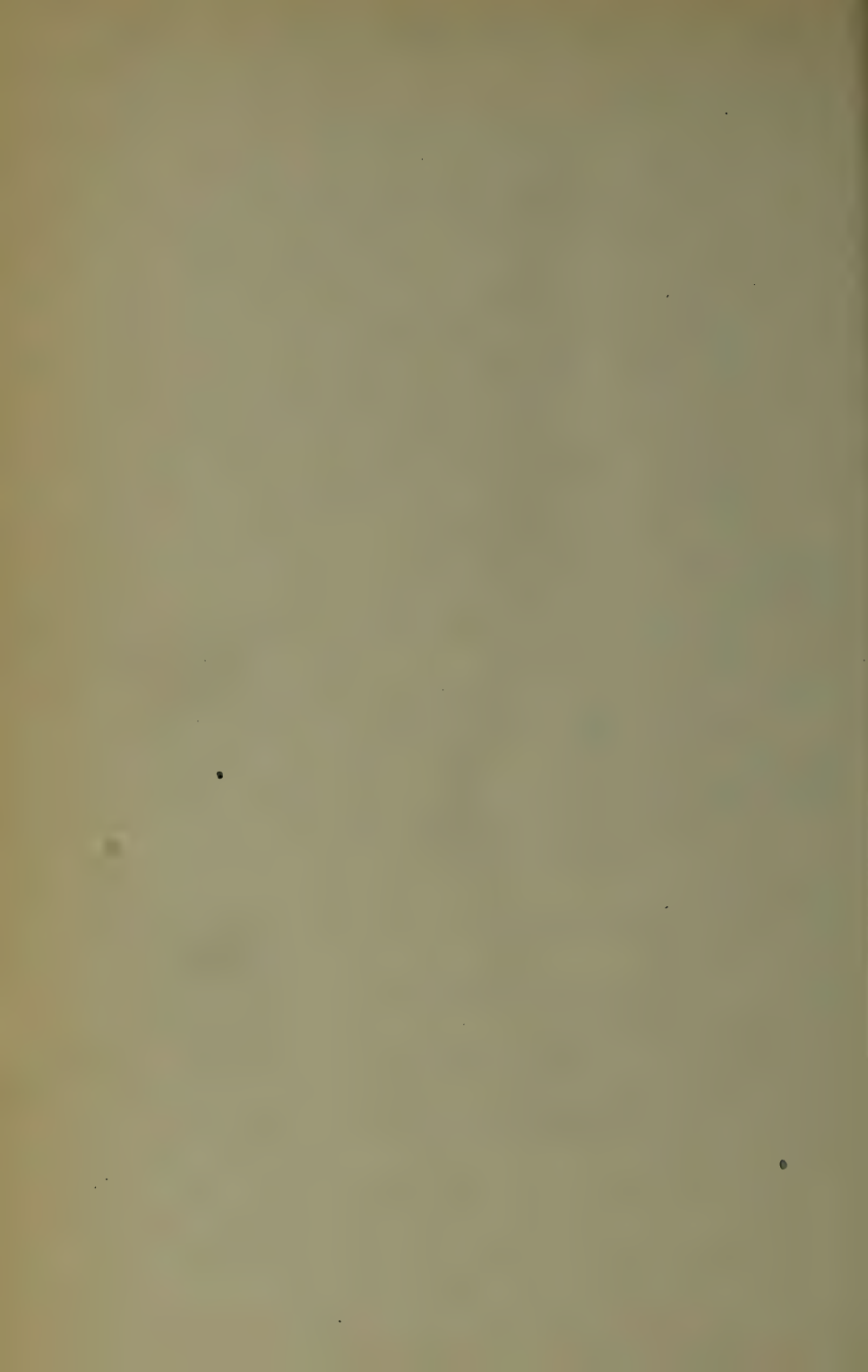
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LAWS

RELATING SPECIALLY TO

RAILROADS.

Statutes Relating Specially to Railroads.

ARTICLE XXV.

AMENDMENT TO CONSTITUTION.

Adopted October, 1877.

No County, City, Town, Borough, or other municipal-^{Town aid to}ity, shall ever subscribe to the capital stock of any rail-^{railroad cor-}road corporation, or become a purchaser of the bonds, ^{porations pro-}or make donation to, or loan its credit, directly or ^{hibited.}indirectly, in aid of any such corporation; but nothing herein contained shall affect the validity of any bonds or debts incurred under existing laws, nor be construed to prohibit the General Assembly from authorizing any Town or City to protect by additional appropriations of money or credit any railroad debt contracted prior to the adoption of this amendment.

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297. Their powers.
298. Designated by badges.
331. Number of annual reports of Railroad Commissioners.
380. Estimates to be furnished for expenses of Board.
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1383. Action for loss of life.
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1473. Willful injury to engines or cars.
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SECTION.

1474. Nuisance on railroad bridge.
1517. Abandonment or obstruction of engines and cars.
1544. Transportation of animals.
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2712. Power of Superior Court over unsafe highways.
2959. Deeds of railroad companies.
2971. Right to land within limits of railroad or canal.
3022. Lien for services or materials.

SECTION 1. In the construction of all statutes of this State, words and phrases shall be construed according to the commonly approved usage of the language; and technical words and phrases, and such as have acquired a peculiar and appropriate meaning in the law, shall be construed and understood accordingly.

G. S. 1875, 553.
Words and
phrases gener-
ally.

1884, ch. 110.
Railroad Com-
pany.

The phrase "railroad company" shall be construed to mean and include all corporations, trustees, receivers, or other persons, that lay out, construct, maintain, or operate a railroad operated by steam power, unless such meaning would be repugnant to the context or to the manifest intention of the General Assembly.

1893, ch. 12.
Railroad and
steamboat po-
licemen.

SECTION 1. Section 296 of the general statutes is hereby amended so that said section shall read as follows : The Governor may, from time to time, upon the application of any railroad, electric or other street railroad, or steamboat company, engaged in the business of transportation in this State, commission, during his pleasure, one or more persons designated by such company, who, having been duly sworn, may act at its expense as policeman upon the premises used by it in its business, or upon its cars or vessels. When any such commission is issued or revoked, the Executive Secretary shall notify the clerk of the Superior Court of each county in which it is intended that such policeman shall act.

1893, ch. 14.
Their powers.

SEC. 2. Section 297 of the general statutes is hereby amended so that the same shall read as follows : Every railroad, electric or other street railroad, or steamboat policeman, may arrest in his precincts for all offenses committed therein, and bring the offenders before proper authority.

1893, ch. 14.
To wear a
shield.

SEC. 3. Section 298 of the general statutes is hereby amended so that said section shall read as follows : Every such policeman shall, when on duty, wear, in plain view, a shield bearing the words, "Railroad Police," "Street Railroad Police," or "Steamboat Police," as the case may be, and the name of the company for which he is commissioned.

1885, ch. 115.
1887, ch. 92.
Number of an-
nual reports to
be printed.

SEC. 331. He [the Comptroller] shall cause to be printed at the expense of the State, annually, such number of copies of each of the following annual reports, as is hereinafter stated, that is to say : Of the Railroad Commissioners, twenty two hundred.

1885, ch. 40.
1887, ch. 5, § 10.
Reports of pub-
lic officers.

SEC. 376. All reports and returns which any public officer is required by law to make, annually, to the Governor, shall be for the fiscal year preceding, and all reports and returns which any such officer is required by law to make to the Governor or General Assembly, biennially, shall be for the two fiscal years preceding ; and all reports and returns as are required to be made annually, except where it is otherwise provided,

shall be made, returned, and printed on or before the first day of November in the year in which they are required to be made. And all such reports and returns as are required to be made biennially, shall be made, returned, and printed on or before the first day of November preceding the next regular session of the General Assembly. All other reports now required to be made annually to the General Assembly shall hereafter be made to the Governor at the same period of the year as now required to be made to the General Assembly.

SEC. 380. The estimates for the different classes of expenditures shall be made as follows, to wit: For 1884, ch. 108.
By whom to be made.

. . . the Railroad Commissioners, . . . The estimates herein required to be made shall be prepared according to such forms as shall be prescribed and furnished by the Treasurer and Secretary. And the Comptroller shall cause a sufficient number of the estimates to be printed and delivered to the General Assembly on the second day of its session.

SEC. 392. No petition for the incorporation of any railroad, horse railroad, canal, or turnpike company, or for an alteration of the charter of any such company, shall be heard by the General Assembly, unless public notice shall be given by advertisement, in some newspaper published in the county where such railroad, horse railroad, canal, or turnpike is proposed to be, or is located, at least three weeks before the first day of the session to which such petition is brought, designating the intended route of such railroad, canal, or turnpike, the streets, highways, and other intended route of such horse railroad, or the proposed alteration of such charter; nor unless the petition for such railroad company is accompanied with, and supported by, the report of a skillful engineer, founded on examination, showing the general profile of the surface of the country through which said railroad is proposed to be made, the manner of its construction, the feasibility of the route, the character of the soil, and probable expense of constructing the same.

G. S. 1875, 79.
Petition for incorporation or alteration of charter of a railroad, horse railroad, canal, or turnpike company.

SEC. 393. No act of incorporation or alteration thereof shall be granted by the General Assembly, except upon a petition therefor, when the law requires that notice of such petition shall be given by advertisement. Every charter of a railroad company, or horse railroad company, shall confine the road within the limits indicated by said notice, specify the towns, and, in case of a horse railroad, the streets or highways through which it may pass, and otherwise designate the

G. S. 1875, 79.
What charters granted only on petition. Charters of railroad and horse railroad companies.

route on which the respective roads may be authorized to be made.

1885, ch. 110,
§ 111.

Trustee of rail-
road company
to release inter-
est, when.

SEC. 517. The trustee of the estate of any railroad corporation in settlement as an insolvent estate may, if the assets of such estate shall not otherwise be sufficient to pay the claims allowed by the commissioners and the expenses of settling the estate, release, subject to any prior existing lien or title to any proprietors of land, any right of way or other easement or incumbrance which said corporation may have in or upon the same, upon such terms as shall be approved by the Court of Probate.

1884, ch. 41.
Attachments of
machinery, en-
gines, etc.

SEC. 918. Attachments of machinery, engines, or implements, situated and used in any manufacturing or mechanical establishment or of the household furniture of any person having a family, and used by him in housekeeping, or of any hay or unthreshed grain deposited in any building, or of any crop deposited in any building, or of brick in kilns, or of wood, sawed lumber, railroad ties, or logs when gathered together in piles, which cannot, in the opinion of the officer levying upon the same, be moved without manifest injury, shall be effectual to hold the same, without any removal thereof; *provided*, the service of such attachment shall be completed and a copy of the process and of the accompanying declaration or complaint, with the officer's return indorsed thereon, particularly describing the property attached, shall be filed in the office of the town clerk of the town in which such property shall be situated within twenty-four hours after such attachment shall have been made; and when the levy is upon any such hay, unthreshed grain, crops, or brick, the officer shall also post a notice of his attachment on the outer door, or other conspicuous place, of the building in which such property is situated.

G. S. 1875, 439.
Fire communi-
cated by rail-
way engine.

SEC. 1096. In all actions to recover for any injury occasioned by fire communicated by any railway locomotive engine in this State, the fact that such fire was so communicated shall be *prima facie* evidence of negligence on the part of the person or corporation who shall, at the time of such injury by fire, be in the use and occupation of such railroad, either as owner, lessee, or mortgagee, and of those who shall at such time have the care and management of such engine.

G. S. 1875, 459.
Levy on inter-
est of one rail-
road company
in road of
another.

SEC. 1178. The levy of executions on the equitable right or interest which any railroad corporation may have in the whole, or any part of the real estate, right of way, or road bed of any other railroad corporation,

together with the income, rents, and profits which may be due, or coming due thereon, shall be by leaving a true and attested copy thereof with the treasurer, secretary, or clerk of said last-named corporation, with an attested certificate by the officer making such levy, that he levies upon such right or interest to satisfy such execution; and thereupon he shall post the same upon some sign-post in the town where such last-named corporation has its office or principal place of business in this State, and, as in cases of personal property, shall, at vendue, sell the same, together with such income, rents, and profits, or so much of them as shall be sufficient to satisfy said execution, and shall give to the purchaser a written conveyance of such right and interest, and shall also leave with such treasurer, secretary, or clerk, a true and attested copy of such execution, and of his return thereon; and the purchaser shall thereupon become entitled to said right and interest, and to all rents, profits, and income thereon, to which such debtor was entitled.

SEC. 1383. No suit against a railroad company for damages for the loss of life shall be brought by the executor or administrator of the deceased person, except within eighteen months from and after the death of such person. G. S. 1875, 495. Actions against railroad companies for loss of life.

SEC. 1400. Every person who shall commit murder in the first degree, or who shall cause the death of another by willfully placing any obstruction upon any railroad, or by loosening, taking up, or removing any part of the superstructure of such railroad, or by willfully burning any building or vessel, shall suffer death. G. S. 1875, 498, § 2. Homicide, when punished by death.

SEC. 1403. Every servant of any railroad company, who shall in consequence of his intoxication, or any gross or willful misconduct or negligence, cause any loss of life, or the breaking of a limb, shall be imprisoned in the State prison not more than ten years. G. S. 1875, 498, § 5. Railroad servants, liability for causing loss of life, etc.

SEC. 1429. Every person who shall willfully place any obstruction upon any railroad, or who shall loosen, tear up, or remove any part of a railroad, shall be imprisoned in the State prison not more than ten years; and if he shall do the same with intent to throw any locomotive or cars from the track of such railroad, or to obstruct any car in motion, he shall be imprisoned in such prison not more than thirty years. G. S. 1875, 502, § 1. Placing obstructions on railroads.

SEC. 1431. Every person who shall willfully displace any switch upon any railroad, or injure or destroy any electric signal in use thereon, or any material or property appertaining thereto, or who shall interrupt the use G. S. 1875, 502, § 2. Displacement of switches or injury to signals on railroads.

of any wire, lever, pin, or battery, used to operate such signal or its connection therewith, shall be fined not more than one hundred dollars, and imprisoned in the State prison not more than ten years.

G. S. 1875, 505,
§ 27.

Willful throw-
ing or shooting
at locomotive
or railroad cars.

SEC. 1471. Every person who shall willfully throw or shoot any missile at any locomotive or railroad car, whereby the safety of any person is endangered, shall be fined not less than fifty nor more than five hundred dollars, or imprisoned not more than one year, or both.

G. S. 1875, 505,
§ 28.

Willful injury
to cars or en-
gines.

SEC. 1472. Every person who shall willfully injure any engine or car, used upon any railroad, shall be fined not more than one hundred and fifty dollars, or imprisoned not more than one year, or both.

G. S. 1875, 505,
§ 29.

Nuisance on
railroad tracks
or in depots.

SEC. 1473. Every person who shall cast, empty, or discharge, or permit to be cast, emptied, or discharged, any filth, rubbish, foul or offensive wash, or water, or the contents of any privy, vault, cesspool, or sewer, upon or into any railroad or railroad depot in any city, shall be fined not more than fifty dollars, half of which shall be paid, by order of court, to the person furnishing to the proper officer information that leads to a conviction.

G. S. 1875, 505,
§ 30.

Nuisances on
railroad bridges

SEC. 1474. Every person who shall commit any nuisance in or upon any railroad bridge, shall be fined not more than seven dollars, or imprisoned not more than thirty days, or both.

1878, ch. 92.
Abandonment
or obstruction
of engines,
cars, etc.

SEC. 1517. Every person who shall unlawfully, maliciously, and in violation of his duty or contract, unnecessarily stop, delay, or abandon any locomotive, car, or train of cars, or shall maliciously injure, hinder, or obstruct the use of any locomotive, car, or railroad, shall be fined not more than one hundred dollars, or imprisoned not more than six months.

G. S. 1875, 514,
§ 15.

Transportation
of animals on
railroads.

SEC. 1544. No railroad company, in transporting animals, shall permit them to be confined in cars more than twenty-eight consecutive hours, except when transported in cars in which they have proper food, water, space, and opportunity for rest, without unloading them for food, water, and rest for at least five consecutive hours, unless prevented by storm or other accidental cause; and in estimating such confinement, the time during which the animals have been confined, without such rest, on connecting roads from which they are received, shall be included. Animals so unloaded shall be properly fed, watered, and sheltered during such rest by the owner or person having their custody, or, on his neglect, by the railroad company transporting them, at his expense; and such company shall, in such case, have a

lien upon such animals for food, care, and custody furnished, and shall not be liable for any detention of them for such purpose; and any such company, owner, or custodian of such animals, who shall not comply with the provisions of this section, shall be fined not less than one hundred, nor more than five hundred dollars. The knowledge and acts of agents of, and of persons employed by such company, in regard to animals transported, owned, or employed by it, or in its custody, shall be held to be its acts and knowledge.

SEC. 1573. Every person who shall enter upon, or cross a railroad at any private way which is closed by gates or bars, and shall neglect to securely close them, shall be fined not less than two, nor more than ten dollars, and shall be liable for any damage resulting therefrom.

1876, ch. 7.
Neglect to close
gates, bars, etc.,
on railroads.

SEC. 1591. Every person who shall fraudulently evade, or attempt to evade, the payment of any fare, lawfully established by any steamboat company located in this State, or by any railroad company, shall be fined not less than five nor more than twenty dollars.

G. S. 1875, 525,
§ 8.
Fraudulent evasion of payment
of fare.

SEC. 1611. When a fine, penalty, or forfeiture is imposed by any statute, as a punishment for any offense, and any part thereof is given to the person aggrieved, or to him who shall sue therefor, and the other part to the State, county, or town, all proper informing officers shall make presentment of such offense to the court having cognizance thereof; and the whole of such fine, penalty, or forfeiture shall, in such case, belong to the State, county, or town, as the case may be. All persons arrested for offenses committed upon cars or steamboats may be prosecuted before any court, in the same manner as if such offenses had been committed in the town in which such court is held.

G. S. 1875, 532.
§§ 3, 7.
1886, ch. 52.
Who may prosecute in *quidam*
suits.

SEC. 1927. No person shall vote at any meeting of the stockholders of any bank or railroad company, by virtue of any power of attorney not executed within one year next preceding such meeting; and no such power shall be used at more than one annual meeting of such corporation.

G. S. 1875, 279.
§ 11.
Proxies.

SEC. 1988. When land shall be taken for railroad purposes, or for any other use public in its character, and the amount found due by the court as damages for taking said land shall be deposited with a county treasurer for the use of the owner of the land so taken, and if such deposit shall not be claimed and taken by the owner thereof for the term of three years from the time such deposit is made, it shall be the duty of the county

1880, ch. 58.
Proceeds from
sale of land to
public, how
kept for owner.

treasurer to pay such deposit to the treasurer of the State, to be by him kept for the persons owning the same, their heirs and assigns; and such payment shall be a discharge to said county treasurer of any liability for such deposit.

G. S. 1875, 34,
§ 3.
Officer may arrest without warrant, when.

SEC. 2002. Sheriffs, deputy sheriffs, constables, borough bailiffs, police officers, and railroad and steamboat police, in their respective precincts, shall arrest, without previous complaint and warrant, any person for any offense in their jurisdiction, when the offender shall be taken or apprehended in the act, or on the speedy information of others; and all persons so arrested shall be immediately presented before proper authority.

G. S. 1875, 517,
§ 11.
Gaming on public conveyances.

SEC. 2557. Every person who shall play at any game, for any valuable thing, or shall solicit another to do the same, upon any public conveyance, and every person who shall win or lose any valuable thing by so playing, or betting on such play, or by sharing in any stake or wager of others who so bet or play, shall be fined not more than two hundred dollars, and imprisoned not less than one, nor more than six months.

G. S. 1875, 232,
§ 8.
Location of timbers in bridges over railroad tracks.

SEC. 2671. The bottom timbers of all bridges, hereafter constructed over any railroad track, shall not be less than eighteen feet above the rails, unless the Railroad Commissioners require a less height and prescribe the same in writing.

1893, ch. 264.
Grade of railroads and height of bridges, how changed.

SECTION 1. Every railroad company, after its line of road shall have been located, approved, and established, may alter the grades of its lines, and may raise any highway bridges that pass over the tracks to such height as may be approved by the Railroad Commissioners, upon application made to them for such approval, and may change the grade of the approaches to such bridges so as to conform to the change in the height of the bridges; but no railroad company may, under the provisions of this act, raise the grade of its tracks so as to lessen the height of an existing bridge over its tracks, without the approval of the Railroad Commissioners.

Amount of damages.

SEC. 2. Damages accruing to any adjoining proprietor on account of any change of grade on the highways which are approaches to any railroad bridge, raised under the provisions of this act, shall be assessed and paid by the railroad companies in accordance with the provisions of Chapter CCXX of the public acts of 1889.

SEC. 3. This act shall take effect upon its passage.

SEC. 2673. Any person injured in person or property by means of a defective road or bridge may recover damages from the party bound to keep it in repair; but no action for any such injury shall be maintained against any town, city, corporation, or borough, unless written notice of such injury, and the nature and cause thereof, and of the time and place of its occurrence shall, within sixty days thereafter, or if such defect consist of snow or ice, or both, within fifteen days thereafter, be given to a selectman of such town or to the clerk of such city, corporation, or borough; and when the injury is caused by a structure legally placed on such road by a railroad company, it, and not the party bound to keep the road in repair, shall be liable therefor.

42 Conn., 294. 43 Conn., 36, 562. 44 Conn., 117. 46 Conn., 56, 263. 47 Conn., 59, 461. 48 Conn., 460. 49 Conn., 134. 51 Conn., 405. 50 Conn., 496, 579. 53 Conn., 212. 54 Conn., 9, 574.

1883, ch. 105.
Persons injured on defective highways may recover damages.
Notice of injury how given.
1 Root, 270, 448.
2 Root, 436.
7 Conn., 86.
17 Conn., 475.
18 Conn., 32.
30 Conn., 12, 35, 543.
36 Conn., 320.
34 Conn., 136.
35 Conn., 314.
37 Conn., 414, 298, 618.
39 Conn., 222, 376.
40 Conn., 205, 238, 456.

SEC. 2692. Section 2692 of the general statutes is hereby amended to read as follows: Any person traveling upon any public street or highway which is crossed by a railroad, who shall be obstructed or prevented from crossing such railroad for a longer time than five minutes, by reason of trains, cars, or locomotives standing upon or across such street or highway, may recover ten dollars and costs from the corporation owning or operating said railroad; *provided*, suit is brought within thirty days after the date of such obstruction.

SEC. 2693. When any railroad crosses a highway in any city at grade within two hundred feet of a covered bridge on said highway, such highway shall not be obstructed by the making up of railroad trains, nor by allowing any train, car, or locomotive to stand on or across said highway for more than three minutes at one time; and whenever such highway has been once so used or occupied, or whenever a locomotive or train has passed entirely over it, said highway shall not again be so used or occupied or crossed by locomotive or cars, until a sufficient time has been allowed to enable all teams which are ready and waiting for the purpose to cross the tracks of said railroad. Any servant, agent, or employé of any railroad corporation willfully violating any provision of this section, shall be fined not more than seven dollars, or imprisoned not more than thirty days, or both.

SEC. 2700. No highway which does not cross a railroad track shall be laid out or opened to the public within one hundred yards of any railroad track, unless

1881, ch. 135.
Highways in cities not to be obstructed by railroad trains.

1878, ch. 134.
Highways laid out within one hundred yards

of railroad track and not crossing same to be approved by judge of Superior Court.

the layout has been approved by a judge of the Superior Court, after notice to all parties in interest, and his written approval lodged in the office of the town clerk of the town in which the proposed highway is situated. No judge shall approve any such layout unless he finds the public convenience and necessity require such highway to be within such distance, and upon such approval the judge may require any town opening a highway to the public within such distance to erect and maintain such a fence between such highway and the railroad track as in their opinion the safety of the public may require.

1889, ch. 170. Proceedings on condemnation of public or private way by railroad company.

Whenever a railroad company shall have acquired the right to take any part of a public highway or a private way, it shall, before taking possession of the same, apply to some judge of the Superior Court, as provided in section 3464 of the general statutes, for the appointment of appraisers to ascertain all damages that may arise to any person in consequence of the taking and occupation of the highway or private way. The appraisers, so appointed, shall be sworn, and shall give notice of the time and place of their meeting by posting on the sign-posts of the town where the highway or private way is situated, and also by advertising once a week for four consecutive weeks in a newspaper published in said town, and if no newspaper is published in said town, then in a newspaper published in the county. They shall also give reasonable notice, in writing, to the persons owning the land occupied by the highway or private way, and taken for such railroad purposes. At the meeting of the appraisers, any person claiming that he will be damaged by the taking and occupation of such highway or private way shall be heard, whether he is the owner of the land or not; and the appraisers shall award such damages as may seem to them to be just and reasonable. Further proceedings in connection with the condemnation of land shall be as prescribed by section 3464 of the general statutes.

G. S. 1875, 237, § 36.

When portion of highway taken by railroad company leaves remainder unsafe, Superior Court may order change, etc.

SEC. 2712. The Superior Court of the county in which is any highway, or any portion thereof, taken by any other than a horse railroad company for railroad purposes, but not in a city or borough which has control of its highways, nor constructed since such railroad, may, upon the petition of any party interested, served upon said company as other civil process, appoint a committee of three to inquire whether such highway or portion thereof is unsafe for travel by reason of such railroad,

or whether any alteration of such highway or the construction of a new highway is thereby rendered necessary for the public safety and convenience ; and such committee shall hear said parties and report their opinion thereon to said court, which may make any proper order in the premises ; and if it shall order any such alteration or construction, and said company shall refuse to comply with such order, said town shall alter or construct such highway and may recover the expense thereof from said company.

SEC. 2959. Whenever any railroad company shall make and properly execute a deed in fee simple of any lands, which said company has derived by purchase, said deed shall effectually convey the title to said lands, to the absolute use of the grantee.

SEC. 2971. If the owner or occupant of any land adjoining any railroad or canal has, since the tenth day of June, one thousand eight hundred and thirty-one, taken, or shall take, into his enclosure any part of the land belonging to said railroad or canal, as located and established, or since that time has erected, or shall erect, any building upon any such land, no adverse possession of the land so enclosed or built upon shall confer any title thereto.

SEC. 3022. Every railroad, for the construction of which, or of any of its appurtenances, any person shall have a claim for materials furnished or services rendered, under any contract with or approved by the corporation owning or managing such railroad, shall, with its real estate, right of way, material, equipment, rolling stock, and franchise, be subject to the payment of such claim ; and said claim shall be a lien on said railroad, railroad property, and franchise, and the manner of asserting and perfecting such lien, by notice, certificate, and foreclosure, shall be in all respects in accordance with the provisions of the four preceding sections ; except that the certificates of the lien and of its discharge shall be filed in the office of the Secretary of the State, who shall record them in a book kept for that purpose.

1875, ch. 14.
Deeds of railroad companies.

G. S. 1875, 355,
§ 20.
Right to land within limits of railroad or canal not gained by possession.

G. S. 1875, 361,
§ 13.
Lien on railroad for services or materials furnished for its construction.
41 Conn., 454.

Title LXVI.

RAILROADS.

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Chapter CCX.

RAILROAD COMMISSIONERS.

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1887, ch. 5, § 37.
Appointment
and term of
Railroad Com-
missioners.

Sec. 3413. There shall be three Railroad Commissioners. The Governor shall, within sixty days from the organization of the General Assembly at its regular session in 1889 and within sixty days from the organization of said assembly, at its regular session quadrennially thereafter, nominate, and with the advice and consent of the Senate shall appoint, two Railroad Commissioners, and shall within sixty days from the organization of the General Assembly at its regular session in 1891, and within sixty days from the organization of said assembly at its regular sessions quadrennially thereafter, nominate, and with the advice and consent of the Senate shall appoint one Railroad Commissioner. The commissioners so appointed shall hold their respective offices for four years from the first day of July next succeeding their respective appointments. The Senate shall act on all nominations of the Governor within ten days after they are made. If the Governor shall fail to nominate, within the sixty days herein prescribed, a person or persons for Railroad Commissioner or Commissioners who shall be confirmed by the Senate, the General Assembly shall fill the vacancy which would otherwise occur.

General Assem-
bly shall fill va-
cancies, when.
43 Conn., 351.

SEC. 3414. One of the Railroad Commissioners shall be a lawyer in good standing in his profession, and at least ten years' practice. One of said Railroad Commissioners shall be a capable and experienced civil engineer, of at least ten years' practice in his said business of civil engineer; and the other of said Railroad Commissioners shall be a good practical business man, and they shall be and constitute the Board of Railroad Commissioners.

SEC. 3415. If any vacancy occurs in said Board of Railroad Commissioners at a time when the General Assembly is not in session, the Governor shall appoint a Railroad Commissioner to fill such vacancy until the rising of the next session of the General Assembly; and all other vacancies shall be filled for the remainder of their respective terms in the manner provided by section 3413; and no stockholder or agent of any railroad company shall be a commissioner.

SEC. 3416. The board shall appoint a clerk and have an office in Hartford where its records shall be preserved, which shall be kept open during the usual business hours. If the Comptroller does not furnish said board a proper office, it may hire one at an annual rent not exceeding five hundred dollars.

SEC. 3417. The Railroad Commissioners shall keep a record of all communications addressed to them officially, of all their official acts and proceedings, and of all facts learned in relation to any casualty, with the names of the persons from whom they were derived, or by whom they may be proved, may employ experts or other agents when necessary, and shall have the powers and be subject to the duties hereinafter specified.

SEC. 3418. The office expenses and salaries of the board shall be paid monthly from the treasury, and in July in each year the whole amount so paid during the year ending the fourth day of July shall be apportioned by the Comptroller among the several railroad companies in proportion to the length of the main track or tracks of their respective railroads in this State, and each company and the trustees, assignees, lessees, or other parties operating any such railroad shall pay the Treasurer their proportion of such amount.

SEC. 3419. The Railroad Commissioners shall have the right to pass free of charge in the performance of their duties, on all railroads in the State, and to take with them any person in their official employment.

SEC. 3420. Before the Railroad Commissioners shall approve the laying out of any railroad, or the taking of

1877, ch. 144.
Composition of
board.
43 Conn., 351.

1877, ch. 144.
Vacancies filled
by Governor,
when.

1877, ch. 144.
Office and clerk.

1877, ch. 144.
Records, and
employment of
experts.

1877, ch. 144.
1878, ch. 50.
Salaries and
contingent ex-
penses.

G. S. 1875, 319,
§ 8.
To pass free on
railroads.

G. S. 1875, 319,
§ 9.

To give notice
before approval
of layout, etc.

any real estate for the purposes of said road, or any change or alteration of the same, they shall give reasonable notice to all persons having an interest in such estate to attend and be heard; and the appraisers shall cause a like notice to be given to all persons interested in the real estate taken or proposed to be taken; and if any such person resides out of this State, or is a *feme covert*, infant, or *cestui que trust*, or *non compos mentis*, any judge of the Superior Court may prescribe the notice to be given to such person.

G. S. 1875, 320,
§ 10.
To certify that
road is safe be-
fore it is opened.

SEC. 3421. No part of any railroad shall be opened for public travel unless the railroad company shall first obtain a certificate signed by the Railroad Commissioners, that such road is in a suitable and safe condition.

G. S. 1875, 320,
§ 11.
To examine
railroads at
least twice a
year.

SEC. 3422. The Railroad Commissioners shall, at least twice in each year, examine the several railroads in the State, and shall make a like examination of any railroad within the limits of any town, when thereto requested in writing by the selectmen, and shall see that the same are kept in suitable repair, and that the railroad companies faithfully comply with all provisions of law.

G. S. 1875, 320,
§ 12.
General duties.

SEC. 3423. Said Commissioners shall cause such portion of the laws relating to railroads as they deem proper to be posted as they shall direct; and may at any time, and on the complaint in writing of five of the stockholders or creditors of any railroad company assigning sufficient reason, shall examine its railroad and all its appurtenances, engine and cars, and its by-laws and rules, and in such examinations shall pass over the road at a rate not exceeding six miles an hour, and shall stop at each culvert, bridge, and piling, and examine the same, and shall examine the rails and ties in every mile, notifying the company in writing of the time of such examinations, and shall notify the company to make all repairs required within a time limited; shall make such rules as to platforms and out-buildings at stations as are for the public interest; may prescribe the time during which any ticket office shall be open for the sale of tickets; and no company neglecting such order shall receive more than the regular ticket price for fare; shall make necessary orders for compelling companies to furnish comfortable seats for passengers, and for regulating the manner in which companies shall manage their engines and cars at highway crossings; shall direct that suitable warning boards be put up at dangerous crossings; may require companies to maintain a gate across a highway at any crossing, and to provide an agent to open or close

the same; shall, when two roads meet or intersect, at the request of the directors of the company owning either, prescribe rules relative to the exchange of passengers and luggage; and shall cause printed copies of sections 3550, 3551, and 3552 to be kept posted up at all railroad stations.

SEC. 3424. The Railroad Commissioners, when requested in writing by the selectmen of any town, the mayor and common council of any city, or the warden and burgesses of any borough (in cases where the borough has charge of the highways within the same), to order a gate or electric signal to be erected, or a flagman to be stationed at any railroad crossing within their respective towns, cities, or boroughs, shall visit such place, first giving the authorities making such request reasonable notice thereof, and if the public safety requires it, shall order the company operating said railroad to maintain a gate or electric signal, or to keep a flagman at said place, or to do any other act at said place needful for the protection of the public, and may specify when said gate shall be opened and closed, or when flagmen shall be on duty, and may change any such order when they deem it necessary, first visiting the town, city, or borough in which said crossing is located, and there giving the authorities thereof an opportunity to be heard thereon; and if any railroad company shall neglect to station flagmen, or maintain gates or electric signals as ordered by said Commissioners, or shall neglect to comply with any order of said Commissioners provided for by this section, it shall forfeit to the State fifty dollars for each day of such neglect.

1884, ch. 59.
May order
gates, flagmen,
and signals.

Penalty for neglect.

SEC. 3425. When the Railroad Commissioners, on application as provided in the preceding section, shall make an order as provided therein, or refuse to make the same, their decision shall be communicated to the parties in interest within thirty days from the final hearing on the same, and either party aggrieved by such decision may appeal therefrom to the Superior Court, in the manner and with like effect as provided for appeals in section 3518, and in all cases in which on an appeal, as aforesaid, an order shall be passed by the Superior Court, said court may at any time upon the application of either party, with due notice to adverse parties, annul or vary such order; *provided* that said court shall find that there has been a change of circumstances surrounding said crossing.

1883, ch. 115.
Appeals.

1839, chap. 216.

SEC. 3426. The Railroad Commissioners shall, from G. S. 1875, 320,
§ 14.

May make recommendation.

time to time, recommend in writing to the several railroad companies, or any of them, the adoption of such measures and regulations as such Commissioners deem conducive to the public safety and interest; and shall report any neglect to adopt such recommendations to the next General Assembly.

Chapter CCXI.

ADDITIONAL PROTECTION TO BRIDGES, TRETTLES, AND PILINGS.

SECTION.

3427. Commissioners may order guard-rails on railroad bridges.

3428. Penalty.

3429. May apply for injunction against any company, when.

SECTION.

3430. Power to examine witnesses; penalty for resisting.

3431. Fees of witnesses.

3432. Report to General Assembly.

1878, ch. 96.
Commissioners
may order
guard-rails on
railroad
bridges.

SEC. 3427. When the Railroad Commissioners shall deem it necessary for the safety of persons traveling upon any railroad in this State that guard rails or any other appliances to secure safety should be placed upon any bridge belonging to such railroad, said Commissioners may order the company owning or operating such railroad to place such additional guards upon said bridge as they may deem necessary and proper to accomplish the object aforesaid.

1878, ch. 96.
Penalty for non-compliance.

SEC. 3428. Any railroad company which shall neglect or refuse to comply with any such order, shall forfeit to the treasurer of the State twenty-five dollars for each day of such neglect or refusal.

G. S. 1875, 321,
§ 15.
May apply for
injunction
against corpora-
tion, when.

SEC. 3429. If, upon examination of any railroad, or the affairs of any railroad company, the Commissioners shall be of the opinion that such road is in such condition, or that its affairs are so conducted as to endanger the safety of the public, or that the company has violated the law, or refused to obey the directions of said Commissioners or of any judge of the Superior Court, made pursuant to the powers given in this title, they may within one year after said examination make application to any judge of the Superior Court for an injunction to restrain any person from exercising or attempting to exercise the duties of any officer in such company; and said judge may proceed thereon as the Superior Court may do on complaints for an injunction.

G. S. 1875, 321,
§ 16.
Power to exam-
ine witnesses.
Penalty for re-
sisting.

SEC. 3430. The Railroad Commissioners may summon and examine under oath such witnesses as they may think proper in relation to the affairs of any railroad company; and whoever shall refuse, without justi-

fiable cause, to appear and testify, or who shall in any way obstruct any Railroad Commissioner in the discharge of his duty, shall be fined not more than one thousand dollars, or imprisoned not more than one year or both.

SEC. 3431. The fees of witnesses summoned by the Railroad Commissioners to appear before them under the provisions of the preceding section, and the fees for summoning such witnesses, shall be taxed by the Commissioners and paid by the Treasurer of the State upon the order of the Comptroller.

SEC. 3432. The Railroad Commissioners shall make a report of the general conduct and condition of all railroads, and of any violation of law by any of them, to each General Assembly not later than the fourth week of its session, with such suggestions for legislation as they may deem proper.

1881, ch. 13.
Fees of witnesses.

G. S. 1875, 321, § 17.
1876, ch. 37.
1883, ch. 66.
Report to General Assembly.

Chapter CCXII.

ORGANIZATION.

SECTION.

- 3433. General railroad law.
- 3434. Articles of Association.
- 3435. Capital stock; name.
- 3436. Engineer's report; affidavit by directors.
- 3437. Subscriptions to stock.
- 3438. Corporate powers.
- 3439. Obtaining right of way.
- 3440. Limitation of time for commencing and completing road.
- 3441. Crossing of navigable waters.
- 2663. Bridges across navigable streams to have draws.
- 3442. Other companies prohibited from holding stock.
- 3443. Companies may consolidate; proviso as to outstanding bonds and competing lines.

SECTION.

- 3444. Consolidation, how effected.
- 3445. Agreement to be ratified by stockholders.
- 3446. Powers of consolidated company.
- 3447. Issue of bonds.
- 3448. Such issue regulated.
- 3449. Where to sue or be sued.
- 3450. Proceedings for permission to increase capital stock.
- 3451. Finding, report, and recommendation by commissioners.
- 3452. Capital stock not to be increased without special authority.
- 3453. Limitation of preceding provisions.

SEC. 3433. Any number of persons not less than twenty-five may form a company for the purpose of constructing, maintaining, and operating a railroad public use in the conveyance of persons and property.

G. S. 1875, 315, § 1.
General railroad law.

SEC. 3434. The persons forming such railroad company shall make and sign articles of association, in which shall be stated : first, the name of the company ; second, the place where its principal office or place of business is located, which shall be and continue in this State; third, the places from and to which and the names of all the towns through and into which it is proposed to construct, maintain, and operate said road ; fourth, the length of said railroad, as nearly as may be,

G. S. 1875, 315, § 2.
Articles of association.

and the amount of capital stock of the company, which shall not be less than ten thousand dollars for every mile of road proposed to be constructed; fifth, the names and residences of not less than nine directors of said company, who shall be chosen by the persons subscribing said articles of association, and a majority of whom shall always be residents of this State, and who shall manage its affairs for one year; but the amount of the funded and floating debt of any such corporation shall at no time exceed the amount of cash actually paid in upon its capital stock.

G. S. 1875, 316,
§ 3.
Capital stock.
Name.

SEC. 3435. The capital stock of said company shall be divided into shares of one hundred dollars each, and each subscriber to such articles of association shall subscribe thereto his name, residence, and the number of shares he agrees to take in such company; and on compliance with the provisions of the succeeding sections of this chapter, such articles of association may be filed in the office of the Secretary of the State, who shall endorse thereon the day they are filed, and record them; and thereupon the persons who have subscribed such articles, together with all persons who shall become stockholders of such company, shall be a corporation by the name specified in such articles.

G. S. 1875, 316,
§ 4.
Engineer's report to accompany the articles of association.

SEC. 3436. Such articles of association shall not be filed and recorded unless they are accompanied by the report, under oath, of a skillful engineer, founded on an actual examination of the route, showing the character and structure of the proposed road-bed, with its indications of rock or earth cuttings; the manner in which it is proposed to construct said railroad; the general profile of the surface of the country through which it is proposed to be made; the feasibility of the route and an estimate of the probable expense of constructing the same; a copy of which report shall be kept on file in the office of the Secretary of the State; nor shall such articles of association be filed and recorded until at least five thousand dollars of stock for every mile of railroad proposed to be made is subscribed thereto, and ten per cent. of such subscription paid in cash to the directors named in said articles, nor unless there is annexed thereto an affidavit made by at least three of said directors, that the amount of stock required by this section has been in good faith subscribed, and ten per cent. in cash paid thereon as aforesaid, and that it is intended in good faith to construct the road named in such articles; and a copy of any articles of association filed and recorded as aforesaid, or of the record thereof, certified

Affidavit by
directors.

by the Secretary of the State, shall be *prima facie* evidence of the due formation, existence, and capacity of said corporation

SEC. 3437. When such articles of association are recorded in the office of the Secretary of the State, the directors may, in case the whole of the capital stock is not subscribed, open books of subscription to the same in such places and on such notice as they may deem expedient, and may continue to receive subscriptions until the whole of the capital stock is subscribed; and no subscription shall be received or taken without such payment of ten per cent.; but such company shall not commence the construction of its road until at least ten thousand dollars a mile is subscribed to the capital stock thereof by responsible persons.

G. S. 1875, 316,
§ 5.
Subscriptions
to the capital
stock.

SEC. 3438. Every railroad company may hold such real estate as may be convenient for accomplishing the objects of its organization; may by its agents enter upon such places as may be designated by its directors, for the purpose of making surveys and determining the line whereon to construct said railroad; and may construct, equip, and maintain a railway, with one or more tracks, over the route specified in its charter or articles of association, and transport persons or property thereon by any power.

G. S. 1875, 317,
§ 6.
Powers of the
company.

SEC. 3439. No land shall be taken except as hereafter in this chapter provided, without the consent of its owner, except within two years after the approval of the location of the route by the Railroad Commissioners; and when the lands of any *feme covert*, infant, *cestui que trust*, or person *non compos mentis*, shall be necessary for the construction of any railroad, said lands may be taken on giving notice to the husband of such *feme covert*, the trustee of any such *cestui que trust*, the guardian, either natural or appointed, of such infant, and the conservator of such person *non compos mentis*, who may respectively release all damages for lands so taken, as fully as if the same were holden in their own right.

G. S. 1875, 317,
§ 7.
1882, ch. 140.
Right of way to
be obtained
within two
years.

Trustees,
guardians, etc.,
may release.

SEC. 3440. If any railroad company formed under the provisions of this chapter shall not, within two years after its articles of association are filed and recorded in the office of the Secretary of the State, commence the construction of its road, and expend thereon ten per cent. of the amount of its subscribed capital, or shall not finish or put in operation its railroad within five years from the time of filing and recording its articles of association as aforesaid, its corporate existence and powers shall cease: *provided*, that the Railroad Commissioners

1882, ch. 140.
Limitation of
time for com-
mencing and
completing
road.

shall extend the time for the commencement of such railroad and expending ten per cent. and for taking lands, for a period or periods not exceeding, in the whole, two years beyond the time of two years hereinbefore referred to, if said railroad company has been prevented by litigation, or by the opposition of any party, from complying with the provisions of this section.

1882, ch. 140.
Crossing of navigable waters.

SEC. 3441. Any railroad company organized under the provisions of this chapter may construct its railroad across navigable waters, when said railroad company shall have filed in the office of the Secretary of the State a sworn statement of a competent engineer, approved by the Railroad Commissioners and the president and treasurer of said railroad company, that there has been expended in the construction of their railroad in this State, a sum equal to ten thousand dollars for each mile of their said railroad within this State between either terminal point in the location of said road and the proposed location of said bridge; *provided*, that no bridge shall be constructed across any river or harbor nearer the sea than some existing bridge across such river or harbor; and *provided*, that all such bridges shall be constructed in such manner, and of such materials and with draws of such width for the passage of vessels, as the Railroad Commissioners shall authorize and direct; but nothing herein shall be construed to authorize any railroad company to construct or use a bridge for any but railroad purposes.

1881, ch. 151.
Bridges across navigable streams to have a draw.

SEC. 2668. No bridge without a draw shall be built or maintained across any water navigated by open-deck vessels for business purposes, whose passage would be impeded thereby. . . .

1882, ch. 140.
Other companies prohibited from holding stock of company established under these provisions.

SEC. 3442. No other railroad company shall subscribe for, take, or hold any stock or bonds of any railroad company established under the provisions of this chapter, either directly or indirectly, unless specially authorized by the General Assembly.

1883, ch. 79.
Railroad companies may consolidate.
Proviso as to outstanding bonds, and as to competing lines.

SEC. 3443. Any railroad company incorporated under the laws of this State for the purpose of building and operating a railroad within this State, extending to or beyond the boundary line of this State, may consolidate its capital stock, franchises, and property with the capital stock, franchises, and property of any other incorporated railroad company, whose line of railroad, built or to be built, is situated wholly outside this State, whenever the railroads of the companies thus consolidating form one continuous line of railroad from some point in this State to some point in an adjoining State; *provided*, that no

companies shall thus consolidate if, at the time of their consolidation, the aggregate outstanding bonds of the companies proposing so to consolidate exceed one-half of what has been actually expended upon the railroads of such consolidating companies, the amount of said outstanding bonds to be ascertained as follows: the same to be certified to the Comptroller in the case of each company by the written statement, under oath, of the president and treasurer of said company, and of an engineer approved by the Railroad Commissioners of this State; and false swearing in the matter shall be perjury; and provided, that no railroad companies shall be consolidated under this provision, whose railroads, built or to be built, run on parallel or competing lines.

SEC. 3444. Such consolidation shall be made as follows: The directors of the companies proposing to consolidate may enter into a joint agreement, under the corporate seal of each company, for the consolidation of said companies and railroads, and prescribing the terms and conditions thereof, the mode of carrying the same into effect, the name of the new company, the number and names of the directors and other officers thereof, and who shall be the first directors and officers, and their places of residence, the number of shares of the capital stock, the amount or par value of each share, and the manner of converting the capital stock of each of said companies into that of the new corporation, and how and when directors and officers shall be chosen, with such other details as they shall deem necessary to perfect such new organization and the consolidation of said companies or railroad. But in no case shall the capital stock of the company formed by such consolidation exceed the sum of the capital stock of the companies so consolidated, at the par value thereof, nor shall any bonds or other evidences of debt be issued for a consideration for, or in connection with, such consolidation.

SEC. 3445. Said agreement shall be submitted to the stockholders of each of said companies at a special meeting thereof, called separately for the purpose of taking the same into consideration; due notice of the time and place of holding said meeting and the object thereof shall be given by each company to its stockholders by written or printed notices addressed to each of the persons in whose names the capital stock of such company stands on the books thereof, and delivered to such persons respectively or sent to them by mail, when their post office address is known to the company, at least

1883, ch. 79.
Consolidation,
how effected.

1883, ch. 79.
Agreement to
be ratified by
stockholders.

thirty days before the time of holding such meeting, and also by a general notice published daily for at least four weeks in some newspaper printed in the city, town, or county where such company has its principal office or place of business; and at the said meeting of the stockholders the agreement of the said directors shall be considered and a vote by ballot taken for the adoption or rejection of the same, each share entitling the holder thereof to one vote, and said ballot shall be cast in person or by proxy, and if two-thirds of all the votes of all the stockholders shall be for the adoption of said agreement, then that fact shall be certified thereon by the secretaries of the respective companies under the seals thereof, and the agreements so adopted, or a certified copy thereof, shall be filed in the office of the Secretary of the State, and shall thereafter be deemed and taken to be the agreement and act of consolidation of the said companies; and a copy of the said agreement and act of consolidation, duly certified by the Secretary of the State under his official seal, shall be evidence in all courts and places of the existence of said new company, and that the provisions of this and the two preceding sections have been fully observed and complied with.

1883, ch. 79.
Powers of consolidated company.

SEC. 3446. Said consolidated company, when so formed, shall have and enjoy all the rights, franchises, property, and privileges which at the time of their consolidation were severally had or enjoyed by said constituent companies, subject to the provision that the consolidation permitted by this chapter shall not confer upon any railroad company any power or privilege not given by the laws of this State to all railroad companies organized under this chapter; and said consolidated company shall be subject as respects the construction, maintenance, operation, and taxation of that portion of its road built or to be built in each State, to the laws of such State as fully as if no consolidation had been made; nor shall the right of any creditor of any company thus consolidated be affected by such consolidation.

1883, ch. 79.
Issue of bonds.

SEC. 3447. Said consolidated company may issue bonds, and secure the same by a mortgage of its entire franchises and property, both within and without this State, existing or to be acquired, or any part thereof, to one or more trustees, to be nominated by said company and approved by the Governor of this State; and said mortgage may provide for a foreclosure or sale of the entire road and franchises in both States, in case of a default upon the bonds by judgment or decree of a court of competent jurisdiction in this State.

SEC. 3448. The provisions of section 3570 shall apply to the bonds and mortgage authorized by the preceding section. 1883, ch. 79. Such issue regulated.

SEC. 3449. Said consolidated company may sue and be sued in any county in this State into or through which its railroad or railroad route may extend; and not less than six of its directors shall be at all times citizens of this State. 1883, ch. 79. Where to sue or be sued.

SEC. 3450. When any railroad company shall desire to increase its capital stock, it shall make application to the Railroad Commissioners in writing, setting forth the amount to which and the purpose for which it is desired to make such increase. Whereupon the Commissioners shall fix a time and place for hearing such application, and require such notice thereof to be given as they may deem reasonable. 1878, ch. 116. Proceedings for permission to increase capital stock.

SEC. 3451. The Commissioners shall make a finding of all the essential facts presented to them in regard to such proposed increase of capital stock, and report the same to the next session of the General Assembly, with a recommendation whether such increase should be allowed or not, and, if allowed, the manner in which and terms upon which such stock should be issued. 1878, ch. 116. Finding of facts, report, and recommendation by Railroad Commissioners.

SEC. 3452. No railroad company shall increase its capital stock except by special authority of the General Assembly, nor shall such authority be given except upon the recommendation of the Railroad Commissioners as herein provided. 1878, ch. 116. Capital stock not to be increased without special authority.

SEC. 3453. Nothing contained in this chapter shall be construed to authorize the construction of any horse railroad in any city or borough; or the taking or using the track, wharves, depot, or depot grounds of any other company without its consent, except for the purpose of crossing or connection. G. S. 1875, 317, § 10. These provisions not to apply to horse railroads or authorize interference with existing railroads.

Chapter CCXIII.

STEAM RAILROADS.

SECTION.

3454. What railroads included in the provisions of this chapter.

3455. Company officers and by-laws.

3456. Meetings, how called; stock votes.

3457. Officers when not to vote on proxies.

SECTION.

3458. Stock not to be voted on, if assessments are unpaid.

3459. Deposit to be made before applying for approval of layout.

SEC. 3454. All railroad companies which transport passengers or freight on their roads otherwise than by animal power alone, shall have all the powers and be subject to all the provisions contained in the succeeding G. S. 1875, 319, § 1. What railroads included in the provisions of this chapter.

sections of this chapter respecting such companies, except when otherwise specially provided in their charters.

1893, ch. 193.
May use elec-
tricity.

Any railroad company organized under and subject to the provisions of Title LXVI of the general statutes and amendments thereto is hereby authorized to operate its railroad by electricity, in addition to the motive power already employed in operating such railroad.

G. S. 1875, 319,
§ 2.
Company
officers and
by-laws.

SEC. 3455. The direction of the affairs of every such company shall be vested in a board of not less than nine directors annually chosen by the company, who may fill any vacancies which may occur in their number, and shall elect one of their own number president of the board, who shall also be president of the company, and may also choose a secretary who shall also be secretary of the company, and be sworn to a faithful discharge of his duty, and a treasurer who shall give bonds to the company in such sum as shall be required by the by-laws, for the faithful discharge of his trust, and such other officers as they may deem expedient, and may make by-laws and regulations in regard to the management of the stock, property, and affairs of said company.

G. S. 1875, 319,
§ 4.
Meetings, how
called; stock
votes.

SEC. 3456. All meetings of the company shall be called in such a manner as shall be provided in the by-laws, and at such meetings each member shall be entitled to one vote for each share held by him.

G. S. 1875, 319,
§ 5.
Officers, when
not to vote on
stock of others.

SEC. 3457. Every railroad company may prohibit the officers from voting in the election of directors upon any other stock than their own; and no officer of such company shall request any stockholder to execute a power of attorney to vote upon his stock; and no person shall be allowed to vote by virtue of a power so obtained; and any person who shall violate the provisions of this section shall be disqualified from holding any office in said company for one year thereafter.

G. S. 1875, 319,
§ 6.
Stock not to be
voted on, if
assessments are
unpaid.

SEC. 3458. No subscriber to the capital stock of any railroad company shall be allowed to vote on any of said stock, unless all assessments or installments on it, legally called in by such company, shall have been paid in full.

1882, ch. 20.
Deposit to be
made by rail-
road company
before applying
for approval of
layout of its
road.

SEC. 3459. Every railroad company, before applying to the Railroad Commissioners for their approval of the location of its road, shall deposit with the State Treasurer a sum equal to eleven dollars per mile of the length of its proposed road in this State. And the Comptroller shall include such company among the several railroad companies in his next annual apportionment of the office expenses and salaries of the board, estimating the length of its main track or tracks as equal to said proposed

length of road. And the Treasurer shall deduct the amount so apportioned to such company from said deposit, and return the remainder to the treasurer of such company.

Chapter CCXIV.

LOCATION AND CONSTRUCTION.

SECTION.

- 3460. What lands may be taken.
- 3461. Alteration of location.
- 3462. Where land is cut off from access to highway.
- 3463. Not to be laid out through cemetery.
- 3464. How lands may be taken.
- 3465. Damages, if road is never actually opened.
- 3466. Condemnation of easements, etc., reserved in a grant to the company.
- 3467. Owners may require a plan of land tak'n.
- 3468. Map of road to be filed with town clerk.
- 3469. Statement to be filed with Secretary.
- 3470. Payment of laborers.
- 3471. Crossing other roads.
- 3472. Contracts with connecting roads.
- 3473. Leases of railroads regulated.
- 3474. Record of conveyance or lease of interest in location.
- 3475. Certificate of assignment, etc., of interest in location, to be recorded.
- 3476. Crossing highways or water-courses.
- 3477. Appeals from order authorizing crossing of streams.
- 3478. Warning boards at grade crossings.
- 3479. Right of way, how obtained on altering highways.
- 3480. To be constructed so as not to cross highways at grade, etc.
- 3481. New highway crossing railroads, how constructed.

SECTION.

- 3482. Commissioners to direct as to structure of bridge over railroad.
- 3483. Alteration of highway crossed at grade.
- 3484. Taking of land for the purpose.
- 3485. Penalty for non-compliance.
- 3486. Change of highway dangerous from proximity to railroad newly located.
- 3487. Such highways when the railroad has been heretofore constructed.
- 3488. Repairs and maintenance of changed highway.
- 3489. Proceedings to secure safety of highway crossings.
- 3490. Assessment of damages.
- 3491. Appeal.
- 3492. Commissioners may forbid the use of certain tracks for switching purposes.
- 3493. May regulate the use of such tracks, on petition, etc.
- 3494. Penalty for non-compliance with order.
- 3495. Appeal from such order.
- 3496. General penalty in absence of special penalty.
- 3497. Forfeiture, how recovered.
- 3498. Commissioners may regulate the speed of cars at crossings, etc., general authority regarding crossings; penalty.
- 3499. Guarding rails at grade crossings.
- 3500. Covered bridges, height of.

SEC. 3460. Every railroad company may lay out its road not exceeding six rods wide, and for the purpose of cuttings, embankments, and procuring stone and gravel, and for necessary turnouts, may take as much more real estate within the limits of its charter as may be necessary for the proper construction and security of the road; but no real estate without the limits of said road shall be so taken without the permission of the parties interested therein, unless the Railroad Commissioners, on application of such company, and after notice to said parties, shall first prescribe the limits within which real estate shall be taken for said purposes, and no railroad shall lay out and finally locate its road without the written approbation of the location by said Commissioners; and any company may change the location of its road, or of any section or part thereof, either before or after such location has been approved by the Commissioners, provided such change is made before the construction of said road or of said section or part thereof

G. S. 1875, 321, § 18.
1883, ch. 131.
Company may lay out road and take land, on payment of appraisal.

Commissioners shall prescribe limits.

has been commenced, and is made with the written approbation of said Commissioners; and *provided*, that all damages that may be occasioned to any person by the taking of any real estate for said purposes shall be paid for by said company as provided by law.

G. S. 1875, 321,
§ 19.
1882, ch. 140.
Alteration of
location.

Certificate of
alteration to be
recorded.

1893, ch. 262.
Land for addi-
tional tracks.

Additional
bridge over
navigable
stream.

1884, ch. 88.
Where land is
taken and other
land is thereby
cut off from
practical access
to the highway.

1881, ch. 154.
Railroad not to
be laid out

SEC. 3461. Every railroad company, after its line of road shall have been located, approved, and established, may so far alter the location of such road as to change the radius of its curves, straighten and improve its lines, width, and extent of depot grounds, slopes, and embankments, and extend its lines of sight, when such changes are approved by the Railroad Commissioners, and may take lands for additional tracks, turnouts, and freight and passenger stations, and depots, also for the purpose of supplying water for the use of its engines and stations. A certificate of which changes or taking, duly signed by such Commissioners, shall be lodged for record in the town clerk's office in the town or towns in which such changes or taking is made.

Any railroad company may so far alter the location of its road as to add to the number of its main tracks, and for that purpose, with the approval of the Railroad Commissioners, may take additional land in the manner now provided by law; but when an additional bridge over a navigable stream shall be required by an enlargement of the main tracks, the same shall be constructed in such manner, and of such materials, and with draws of such width for the passage of vessels, as the Railroad Commissioners shall authorize and direct, and such additional bridge shall be subject to the provisions of section 3503 of the general statutes.

SEC. 3462. When any railroad company shall take land for railroad purposes, the effect of which is to cut off other land from practical access to the highway, said railroad may, with the approval of the Railroad Commissioners, take additional land, sufficient to procure a convenient way from the land so cut off to the highway, and shall provide for the use of the owner of the land cut off as aforesaid a suitable way over such additional land to the highway. Said way shall remain a private way for the use of the owner of the land cut off as aforesaid, and the city or town in which it is situated shall not be liable for its maintenance nor responsible for its defects. For the purposes of this section, lands may be acquired in the manner provided by law for the taking of land by railroad companies.

SEC. 3463. No railroad company shall lay out or locate its road, or any part thereof, through any ceme-

tery or any approach in common use from the highway thereto, and within one-quarter of a mile thereof, unless the Railroad Commissioners, when called upon to approve the proposed layout of said road, shall find that said cemetery, or the approach thereto, was located for the purpose of obstructing such layout, or unless said Commissioners shall unanimously approve such layout or location.

SEC. 3464. When any railroad company shall have the right to take real estate for railroad purposes, and cannot obtain it by agreement with the parties interested therein, it may apply to any judge of the Superior Court for the appointment of appraisers to estimate all damages that may arise to any person from the taking and occupation of such real estate for railroad purposes, and after reasonable notice of said application shall have been given to all parties in interest, such judge shall appoint three appraisers, who shall be sworn, and give reasonable notice to said parties in regard to the time and place of making such estimate, and shall view the premises and estimate such damage, but shall not include in such estimate the expense of erecting and maintaining fences along the line of such railroad; and shall return an appraisal of such damages in writing, under their hands, to the clerk of the Superior Court in the county where the estate lies, who shall record it; and when so returned and recorded, such appraisal shall have the effect of a judgment, and execution may issue at the end of sixty days from the time of such return, in favor of the persons respectively to whom damages may be appraised; and said appraisers shall be paid by said company for the time actually spent in making such appraisal and return; but no railroad shall be worked upon, or opened across any real estate, until the damages appraised to any person interested therein shall have been paid or secured to be paid to his satisfaction, or deposited with the treasurer of the county for his use.

through
cemetery.

G. S. 1875, 321.
§ 20.
Land, how
taken, ap-
praisal, dam-
ages, etc.
21 Conn., 294.
26 Conn., 249.

Any railroad company, owning a railroad which has been constructed and is being operated over land to which it has not acquired title, may take such land within the limits of its location, at any time within two years after the approval thereof by the Railroad Commissioners, by proceedings under section 3464 of the general statutes; *provided*, that nothing herein shall be construed to authorize the taking or using the track, wharves, depot, or depot grounds of any other company without its consent, except for the purpose of crossing or connection.

1889, ch. 149.
Taking of land
already occu-
pied.

G. S. 1875, 322,
§ 21.

Land owners to
recover actual
damages only,
where road is
discontinued
before opened
and worked.

SEC. 3465. When any real estate shall have been laid out for railroad purposes, and the damages shall have been appraised, and such road, or any part thereof, shall have been abandoned or discontinued before the same shall have been opened and worked, no such execution shall issue, nor shall an action be brought against said company for the recovery of such damages by any of the owners of land over which such road or part of a road shall have been laid out and discontinued as aforesaid; but any such owner may recover of such company the actual damage which he may have suffered in consequence of the laying out of the road, or for any unreasonable delay in opening and working the same.

1893, ch. 263.
Elimination of
private crossings and condemnation of easements.

SECTION 1. The owner of any private crossing at grade of the tracks of a railroad company, or of any right, title, interest, easement, or privilege in land used by any railroad company for railroad purposes, or the directors of any railroad company whose land is incumbered by any such private crossing, right, title, interest, easement, or privilege, may bring a petition to the Railroad Commissioners for the elimination of such private crossing, and the condemnation of such right, title, interest, easement, or privilege, which petition shall be in writing, alleging that public safety requires the elimination of such incumbrance. The Railroad Commissioners shall thereupon appoint a time and place for hearing the petition, and shall give such notice thereof as they shall judge reasonable to the owner of said right, title, interest, easement, or privilege, to the railroad company, and to the owners of land adjoining the highway to be laid out, if any such highway is laid out, as hereinafter provided, to be used as a substitute for such private crossing. Upon the hearing of said petition, if public safety so requires, the commission shall authorize the railroad company to condemn such private crossing, right, title, interest, easement, or privilege, and thereupon the railroad company may proceed to condemn the same in the manner provided by law for the taking of lands by railroad companies. Upon the hearing of said petition, if the Railroad Commissioners shall be of opinion that public convenience and necessity require a highway on account of the elimination of said private rights in the land of the railroad company, they may lay out a highway sufficient to satisfy public convenience; but such new highway shall not be laid out if the land of a private owner, with which the incumbrance is associated,

is already connected with a public highway. If the Railroad Commissioners shall order a new highway, as hereinbefore set forth, they shall assess the expenses of making the same, including the damages to any person whose land is taken, proportionally upon the person and parties especially benefited thereby, but at least one-half of such expense shall be paid by the railroad company.

SEC. 2. The Commissioners may order the elimination of any private crossing at grade, as aforesaid, by the substitution of an overhead or underneath crossing, in which case the expense of making such change, including land damages, shall be paid by the railroad company.

SEC. 3. Any person aggrieved by any order or judgment of the Railroad Commissioners, under this act, may appeal from such order or judgment to the Superior Court for the county in which the land lies, in the manner and with like effect that appeals are taken from the orders of Railroad Commissioners under section 3518 of the general statutes.

SEC. 4. Section 3466 of the general statutes, Chapter CXLVIII, and Chapter CCLII of the public acts of 1889 are hereby repealed.

SEC. 3467. When any railroad company shall take any property for the purpose of its railroad, the owner of such property may at any time within three years thereafter demand in writing of the treasurer of the company a written description of such property so taken, and said company shall within thirty days deliver to him such description; and if it fail to do so, all its rights to enter upon or use said property, except for making surveys, shall be suspended until it shall have so delivered such description.

SEC. 3468. Within ninety days after the railroad of any company shall have been laid out in any town and approved by the Railroad Commissioners, such company shall deposit with the town clerk a correct plan, signed by its president, of so much of said railroad as lies in said town, drawn on a scale of at least five inches to the mile, upon which shall be accurately delineated the direction and length of each course, and the width of the land taken.

SEC. 3469. Every railroad company shall, within six months after the final location of its road, file a statement of such location, defining the courses and distances, with the Secretary of the State.

Substitution of crossings.

Appeal from commissioners.

Repeal.

G. S. 1875, 322, § 22. Owners may require a plan of land taken.

G. S. 1875, 322, § 23. Corporation to deposit plan of road with town clerk.

G. S. 1875, 322, § 24. Location of road to be filed in Secretary's office.

G. S. 1875, 322,
§ 25.
Security from
contractors for
paying laborers;
liability of com-
pany therefor.

SEC. 3470. Every railroad company, in making contracts for the building of its road, shall require sufficient security from the contractors for the payment of all labor thereafter performed in constructing the road by persons in their employ; and the company shall be liable to the laborers employed for labor actually performed on the road, if they, within twenty days after the completion of such labor, shall, in writing, notify its treasurer that they have not been paid by the contractors.

1882, ch. 138.
1883, ch. 130.
Crossing of one
railroad by
another.

SEC. 3471. Any railroad company may, in the construction of its railroad, cross the railroad of any other company, or connect with the same; and if it cannot agree with such other railroad company, or the managers thereof, as to such crossing or connection, the Railroad Commissioners may determine the place and manner of such crossing or connection, after reasonable notice to the several companies in interest to appear and be heard in relation to the matters contained in such notices, and may make such orders as to bridges, abutments, piers, tunnels, arches, excavations, retaining walls, embankments, and approaches as they shall judge necessary; but no railroad shall cross any other railroad at grade, except for the purpose of connecting therewith, when the avoidance of a grade crossing is practicable, and the Railroad Commissioners shall be judges of the question of practicability.

1889, ch. 208.
Electric, etc.,
and steam rail-
road crossings.

Chapter CXLVIII of the public acts of 1889 is hereby amended to read as follows: No electric, cable, or horse railroad shall hereafter be constructed across the tracks of a steam railroad at grade, except upon application to and approval by the Railroad Commissioners, nor shall any steam railroad cross any such electric, cable, or horse railroad at grade, except upon like application and approval.

G. S. 1875, 323,
§ 27.
Contracts with
connecting or
intersecting
roads.

SEC. 3472. Any railroad company may make lawful contracts with any other railroad company with whose railway its tracks may connect or intersect in relation to its business or property, and may take a lease of the property or franchises of, or lease its property or franchises to, any such railway company.

1889, ch. 166.
Railroad com-
pany may build
branch, when.

SEC. 1. Any railroad company in this State may build branches from its main line or from any of its leased lines; *provided*, that the construction of such branch is found by a judge of the Superior Court, upon due application after such reasonable public notice as such judge may order, to be of public necessity and convenience.

SEC. 2. For the purpose of paying the cost of building any such branch, said railroad company may issue bonds secured by mortgage to the amount of one-half of said cost, to be verified in the manner now provided by law for verifying the cost of a railroad for the purpose of issuing bonds.

Issue of bonds therefor.

SEC. 3. So much of section 3472 of the general statutes as relates to the construction of branches by railroad companies is hereby repealed.

Repeal.

SEC. 4. This act shall be deemed to be an addition to, and amendment of, all charters of railroad companies, and shall repeal all limitations in any charter as to the length of branches which it may build.

Effect of this act on railroad charters.

SEC. 3473. No lease of any railroad made after April 25, 1878, shall be binding on either of the contracting parties for a period of more than twelve months, unless approved by the stockholders of the company or companies that are parties to the lease, by a vote of two-thirds of the stock represented in person or by proxy, at a meeting of the stockholders called for that purpose, and at least one month's notice given of such meeting by advertising twice a week for four weeks in a daily paper published in the State, and also by mailing a copy of the call and of the lease to each stockholder; and said notice and call shall state that at the meeting the lease will be submitted for the approval of the stockholders.

1878, ch. 65.
Leases of railroads regulated.

SEC. 3474. All conveyances by any railroad company, or its assigns, of any interest in the location of its railroad, to be used or enjoyed for railroad purposes, may, and if in the nature of a lease, whether now in force or hereafter executed, for a term exceeding one year, shall be recorded by the grantee or lessee in the office of the Secretary of the State.

1887, ch. 76.
Record of conveyance or lease of interest in location.

SEC. 3475. Certificates of the assignment, release, or foreclosure of any interest or lien in or upon the location of any railroads, acquired under any such conveyance as specified in the preceding section, or by virtue of the general laws of the State, may be recorded in like manner, and with the same effect.

1887, ch. 76.
Certificate of assignment, release, or foreclosure, may be recorded.

SECTION 1. In any contract for the sale of railroad or street railway equipment, or rolling stock, it shall be lawful to agree that the title to the property sold, or contracted to be sold, although possession thereof may be delivered immediately or at any time or times subsequently, shall not vest in the purchaser until the pur-

1893, ch. 119.
Sale of equipment.

chase price shall be fully paid, or that the seller shall have and retain a lien thereon for the unpaid purchase money. And in any contract for the leasing or hiring of such property it shall be lawful to stipulate for a conditional sale thereof at the termination of such contract, and that the rentals or amounts to be received under such contract may, as paid, be applied and treated as purchase money, and that the title to the property shall not vest in the lessee or bailee until the purchase price shall have been paid in full, and until the terms of the contract shall have been fully performed, notwithstanding delivery to and possession by such lessee or bailee; *provided*, that no such contract hereafter made shall be valid as against any subsequent attaching creditor, or any subsequent *bona fide* purchaser, for value and without notice, unless the same shall be evidenced by an instrument executed and duly acknowledged by the parties thereto before some person authorized by law to take acknowledgment of deeds, and in the same manner as deeds are acknowledged, and duly recorded in the office of the Secretary of this State, nor unless each locomotive engine or car, so sold, leased, or hired, or contracted to be sold, leased, or hired, as aforesaid, shall have the name of the vendor, lessor, or bailor plainly marked on each side thereof, followed by the word "owner," or "lessor," or "bailor," as the case may be.

Contracts, when recorded.

SEC. 2. The contracts herein authorized shall be recorded by the Secretary of this State in a book of records to be kept for that purpose. And on payment in full of the purchase money, and the performance of the terms and conditions stipulated in any such contract, a declaration in writing to that effect, or a proper quit-claim deed, shall be made, executed, and acknowledged by the vendor, lessor, or bailor; or his or its assignee, and recorded in the office of the Secretary of this State. And for such services the Secretary shall be entitled to receive the same fees as in the cases of railroad mortgages.

Contract heretofore made not affected.

SEC. 3. This act shall not be held to invalidate or affect in any way any contract heretofore made of the kind referred to in the first section hereof, and any such contract heretofore made may, upon compliance with the provisions of this act, be recorded as herein provided.

G. S. 1875, 323,
§ 28.
Crossing high.

SEC. 3476. When it shall be necessary for the construction of a railroad to intersect or cross any water-

course not navigable, or any public highway, the railroad company may construct said railroad across or upon the same if the Railroad Commissioners shall judge it necessary; but said company shall restore said water-course or highway thus intersected to its former state, or in a sufficient manner not to impair its usefulness; and in case any highway is so located that said railroad cannot be judiciously constructed across or upon the same without interfering therewith, said company may, with the consent of said Commissioners, cause such highway to be changed or altered, so that said railroad may be made on the best site for that purpose; but said company shall put such highway in as good situation and repair as it was previous to such alteration under the direction of said Commissioners, whose determination thereon shall be final.

SEC. 3477. When any railroad company shall be authorized by the Railroad Commissioners to cross any stream of water, or water-course, not navigable, or pond of water, an appeal shall be allowed to any interested person aggrieved by such permission, to any judge of the Superior Court, within twenty days after the owners of the land adjoining said stream, at the point of said crossing, shall have had actual notice of the manner in which said Commissioners have permitted said stream to be crossed; which appeal shall be by a suitable petition, in writing, for a hearing in regard to the crossing, with a citation attached thereto, returnable within twelve days after its date, and served at least five days before the return day, upon such company. And said judge shall have, for the purpose of disposing of said appeal, all the powers of the Superior Court, and may proceed, by himself, or by committee, to a hearing in regard to the propriety of said manner of crossing; and may render a decree either establishing more and sufficient waterway at the place of crossing, or providing such method of crossing that the usefulness and safety of said stream may be preserved, and that the safety of the public may not be endangered; or may confirm said mode of crossing; and if said alteration is so decreed may award costs against said company; and if said mode of crossing is confirmed, may award costs against the appellants, and may issue execution in favor of either party for costs to be taxed as in civil actions in court. Said appeal shall be a *supersedeas*, so far as said crossing is concerned, until judgment shall be rendered thereon by said judge.

G. S. 1875, 323,
§ 29.
Appeals from
order authorizing the crossing
of non-navigable streams.

Award of costs.

SEC. 3478. Every railroad company shall keep and maintain at each crossing at grade of any highway, at

G. S. 1875, 324,
§ 31.
Warning boards

at grade crossings.

G. S. 1875, 324, § 32.

Right of way for highways for railroads, how obtained.

which there is no gate, warning boards of such a description as the Railroad Commissioners may approve.

SEC. 3479. When any highway or street shall be changed or altered by any railroad company with the consent of the Railroad Commissioners, and it shall be necessary to take any land for a highway to which such company has not obtained title, and over which neither said company nor the town in which such change shall be made has any right of way, and said company is unable to agree with the owner thereof in regard to the amount of damages to be paid therefor, the same proceedings shall be had for the purpose of procuring the required right of way as are provided by law in regard to taking land for railroad purposes.

1883, ch. 107. Railroads to be constructed so as not to cross highways at grade, etc. 39 Conn., 128. 51 Conn., 574.

SEC. 3480. Every railroad company which may locate and construct a railroad across any turnpike, highway, or public street, shall construct it so as to cross over or under the same; and may, under the direction of the Railroad Commissioners, raise or lower the same at said crossing, or change the location thereof; and shall make and maintain such bridges, abutments, tunnels, arches, excavations, embankments, and approaches, as the Railroad Commissioners shall order, and the convenience and safety of the public travel upon said turnpike, highway, or street may require; but the Railroad Commissioners may, upon due notice to said company and to the selectmen of the town or mayor of the city in which said crossing is situated, direct such company or trustee to construct its railroad at such crossing upon a level with the turnpike, highway, or street; but no such direction shall be given in any case, except for special reasons which shall be recorded in the records of the Railroad Commissioners.

1883, ch. 107. New highway crossing railroad, how constructed. 55 Conn., 19.

SEC. 3481. When a new highway or a new portion of a highway shall hereafter be constructed across a railroad, such highway or portion of highway shall pass over or under the railroad, as the Railroad Commissioners shall direct. The railroad company operating such railroad shall construct such crossing to the approval of the Railroad Commissioners, and may take land for the purposes of this section in the manner provided by law for the taking of lands by railroad companies. One-half the expense of such crossing shall be borne by the company constructing the same, and one-half thereof shall be paid to said company by the town, city, or borough which constructs such highway or portion of highway. If said highway shall cross over said railroad, the structure necessary therefor shall be maintained and

Expense, how defrayed.

kept in repair by the party bound to maintain said highway ; but if it shall cross under said railroad, such structure shall be maintained and kept in repair by said company.

SEC. 3482. When a highway, or portion of a highway, has been or shall be laid out or ordered to be laid out across a railroad, and the Railroad Commissioners shall direct such highway to be carried over the railroad, they shall determine the length, width, and material of the bridge over the railroad before the damages that may be occasioned to any person by the taking of land for such highway are finally assessed; and said Commissioners may require such bridge to extend beyond the railroad crossed by it, but in cases pending June first, 1887, said Commissioners may determine the length, width, and material of such bridge at any stage of the proceedings.

1887, ch. 63.
Railroad Commissioners to direct as to structure of bridge over railroad.

SEC. 1. The selectmen of any town, the mayor and common council of any city, the warden and burgesses of any borough within which a highway crosses or is crossed by a railroad, or the directors of any railroad company whose road crosses or is crossed by a highway, may bring their petition in writing to the Railroad Commissioners, therein alleging that public safety requires an alteration in such crossing, its approaches, the method of crossing, the location of the highway or crossing, the closing of a highway crossing and the substitution of another therefor, not at grade, or the removal of obstructions to the sight at such crossing, and praying that the same may be ordered; whereupon the Railroad Commissioners shall appoint a time and place for hearing the petition, and shall give such notice thereof as they judge reasonable to said petitioner, the railroad company, the municipalities in which such crossing is situated, and to the owners of the land adjoining such crossing and adjoining that part of the highway to be changed in grade; and after such notice and hearing, said Commissioners shall determine what alterations, changes, or removals, if any, shall be made and by whom done; and if the aforesaid petition is brought by the directors of any railroad company, or in behalf of any railroad company, they shall order the expense of such alterations or removals, including the damages to any person whose land is taken, and the special damages which the owner of any land adjoining the public highway shall sustain by reason of any change in the grade of such highway, in consequence of any change,

1889, ch. 220.
Proceedings on petition for abolition of railroad grade crossings.

alteration, or removal ordered under the authority of this act, to be paid by the railroad company owning or operating the railroad in whose behalf the petition is brought, and in case said petition is brought by the selectmen of any town, the mayor and common council of any city, or the warden and burgesses of any borough, they may, if the highway affected by said determination was in existence when the railroad was constructed over it at grade, or if the layout of the highway was changed for the benefit of the railroad after the layout of the railroad, order an amount not exceeding one-quarter of the whole expense of such alteration, change, or removal, including the damages, as aforesaid, to be paid by the town, city, or borough in whose behalf the petition is brought, and the remainder of the expense shall be paid by the railroad company owning or operating the road which crosses such public highway; if, however, the highway affected by such order, last mentioned, has been constructed since the railroad which it crosses at grade, the Railroad Commissioners may order an amount not exceeding one-half of the whole expense of such alteration, change, or removal, including the damages, as aforesaid, to be paid by the town, city, or borough in whose behalf the application is brought, and the remainder of the expense shall be paid by the railroad company owning or operating the road which crosses such public highway. The directors of every railroad company which operates a railroad in this State shall remove or apply for the removal of at least one grade crossing each year for every sixty miles of road operated by it in this State, which crossings, so to be removed, shall be those which in the opinion of said directors are among the most dangerous ones upon the lines operated by it, and if the directors of any railroad company fail so to do, the Railroad Commissioners shall, if in their opinion the financial condition of the company will warrant, order such crossing or crossings removed as in their opinion the said directors should have applied for the removal of under the above provisions, and the Railroad Commissioners in so doing shall proceed in all respects as to method of procedure and assessment of expense as if the said directors had voluntarily applied therefor.

Proceedings by
Railroad Com-
missioners in
absence of
application.

SEC. 2. The Railroad Commissioners may in the absence of any application therefor, when in their own opinion public safety requires an alteration in any highway or highways crossed at grade by a railroad or by railroads belonging to or operated by more than one

company, after a hearing had upon such notice as they shall deem reasonable to the railroad company or companies owning or operating said railroad or railroads, and to the selectmen of the town, mayor of the city, or warden of the borough within which said highway or highways are situated, and to the owners of the land adjoining said crossing, order such alterations in such highway or highways as they shall deem best, and shall determine and direct by whom such alterations shall be made, at whose expense, and within what time; *provided*, that in all cases arising under this section one-fourth of the expense, including damages and special damages, as aforesaid, shall be paid by the State and the remainder shall be assessed upon the railroad company or companies benefited by such order; *and provided*, that such alterations as are thus made at the primary instance of the Railroad Commissioners shall not be ordered so as to direct the construction of more than one bridge in any one year on any one railroad.

SEC. 3. Railroad companies may take land for the purpose of this act in the manner provided by law for the taking of lands by railroad companies. Taking of land for the purpose.

SEC. 4. Whenever the Railroad Commissioners, upon an application brought under the provisions of section one of this act, shall find that any highway crosses or is crossed by the tracks of more than one railroad, and the tracks of such railroads are so near together that public convenience requires the work of separating the grades to be done under and in compliance with one order, they shall give notice to all the companies operating said railroads to appear before them and be heard upon the application, and after such notice and hearing said Commissioners shall determine what alterations shall be made, if any, so as to separate the grades of all of said crossings at the same time, and they shall determine by whom such work shall be done, and they shall apportion the expense to be borne by the railroad companies between such companies in such manner as they, the said Commissioners, shall deem proper. When tracks of more than one railroad cross a highway.

SEC. 5. Damages under the provisions of this act on account of any change of grade in highways shall be assessed in the same manner as in the case of land taken for railroad purposes; and the provisions of this act in relation to such damages for change of grade shall apply in the case of any order passed by the Railroad Commissioners or Superior Court since June 1. 1887, under the authority conferred by section 3489 of the general statutes. Damages, how assessed.

Appeals.

SEC. 6. The provisions of section 3491 of the general statutes in relation to appeals shall apply to any decision of the Railroad Commissioners under the authority of this act.

1893, ch. 244.
Repairs, who
bound to make.

SECTION 1. Section seven of Chapter CCXX of the public acts of 1889 is hereby amended to read as follows: It shall be the duty of railroad companies to maintain and keep in repair all structures heretofore or hereafter erected over their tracks at any highway crossing, and the approaches to the crossings when the same are made with plank surface, and also to keep in repair the surface of the highway, including the planking or other surface material of the highway upon such structure, and it shall be the duty of the municipality where such bridge or bridges are located to notify any agent of the railroad company owning such bridge or bridges or structure of any defect in the same, and such notice shall be in writing.

Repeal.

SEC. 2. All acts or parts of acts inconsistent herewith are hereby repealed.

SEC. 3. This act shall take effect upon its passage.

Pending
applications.

SEC. 8. The provisions of this act shall apply to any cause or application now pending before the Railroad Commissioners or Superior Court. All provisions of the general statutes which relate to sections 3483 and 3489 of the same shall be deemed to apply to the provisions of this act.

Repeal.

SEC. 9. Sections 3483 and 3489 of the general statutes are hereby repealed, but no rights, duties, or obligations belonging to or imposed upon any parties by any judgments heretofore rendered, shall be impaired or altered by such repeal.

1884, ch. 100.
Alterations of
highway
crossed at
grade.
53 Conn., 307.

[The following section is repealed by Chapter 220, Sec. 9, Acts of 1889: SEC. 3483. The Railroad Commissioners may, when in their opinion public safety requires an alteration of any highway crossed at grade by a railroad, after a hearing had upon such notice as they shall deem reasonable to the railroad company owning or operating said railroad, and to the selectmen of the town, mayor of the city, or warden of the borough within which said highway is situated, and to the owners of the land adjoining said crossing, order such alterations in such highway as they shall deem best, and shall determine and direct by whom such alterations shall be made, at whose expense, and within what time; provided, that in no case shall more than one-half the expense be paid by the town, city, or borough aforesaid; and provided, that such alterations as are made at the primary instance of the Railroad Commissioners shall not be ordered at the rate of more than one a year on any one railroad, except in the case of railroads having a

double track throughout their entire length. Railroad companies may take land for the purposes of this section, in the manner provided by law for the taking of lands by railroad companies.]

The decision of the Railroad Commissioners rendered in any proceeding under section 3483 of the general statutes shall be communicated within twenty days after final hearing, to all parties to whom notice of the hearing had on said proceeding was given; and any person aggrieved by such decision, who was a party to said proceeding, may appeal therefrom in the same manner, and with like effect, as is provided in the case of appeals from any order of the Railroad Commissioners, upon any proceeding relative to the location, abandonment, or changing of depots or stations.

SECTION 1. The sums of money assessed by any orders of the Railroad Commissioners, or the Superior Court, upon appeal from such orders, against any town or city in this State, where the applications were brought by the directors of any railroad company since May 1, 1885, for the removal of grade crossings in the cases of highways which were in existence before the construction of the railroad, shall be reimbursed by the State to such towns or cities. Towns or cities entitled to reimbursement under the provisions of this act shall present their claims to the Comptroller, and proofs and proper certificates to his satisfaction from the Board of Railroad Commissioners; and the Comptroller shall thereupon draw his order on the Treasurer in favor of such towns or cities, respectively, for the amounts to which he shall find the towns or cities to be entitled under the provisions of this act.

SEC. 2. This act shall take effect upon its passage.

SEC. 3484. No lands shall be taken by any railroad company for the purpose mentioned in the preceding section, except such as are necessary, which necessity shall be certified by the Railroad Commissioners; but no such taking need be based upon any special finding that public necessity and convenience require such taking.

SEC. 3485. Every railroad company which shall fail to comply with any provision of sections 3480, 3481, 3483, and 3484, shall forfeit to the town in which such crossing is situated, one hundred dollars for each and every month of such non-compliance. In each and every instance of such non-compliance the Railroad Commissioners shall give notice of all such forfeitures to said town, which shall collect the same.

1889, ch. 217.
Notice of decision of R. R. Commissioners as to grade crossings, and appeals from such decision.

1893, ch. 252
Town or cities to be reimbursed for assessments for removal of grade crossings.

1883, ch. 107.
Taking of land for the purpose.

1884, ch. 100.
Penalty for non-compliance.

1884, ch. 106.
Change of highway dangerous from proximity to railroad newly located.

SEC. 3486. When a railroad has been laid out or located so near to a highway and in the same general direction as, in the opinion of the selectmen of any town, warden of any borough, or mayor of any city, within which the said highway is situated, to endanger public travel, the said selectmen, warden, or mayor may bring their petition to the Railroad Commissioners, setting forth the same; and the said Commissioners, after reasonable notice to the railroad company to appear and be heard in relation thereto, shall, if in their opinion public safety so requires, and a change of the location of such highway is practicable, forthwith order said railroad company to make said change, in such manner as the Commissioners may determine; and such change, including the cost of fencing such re-located highway, shall be done at the expense of said railroad company.

1884, ch. 106.
Such highways when the railroad has been heretofore constructed.

SEC. 3487. In case any railroad has been heretofore constructed so near any highway in any town, city, or borough, as, in the opinion of the selectmen, mayor, or warden of such town, city, or borough respectively, to endanger public travel, said selectmen, mayor, or warden may bring their petition to the Railroad Commissioners, who shall inquire into the facts, and, if in their judgment public safety so requires, may order the location of said highway to be changed, and determine by whom the work shall be done, and the expense of such change, including the cost of fencing, shall be paid equally by said town, city, or borough, and said railroad company.

1884, ch. 106.
Repairs and maintenance of changed highway.

SEC. 3488. When the Railroad Commissioners, in accepting the layout of any railroad company, have in such acceptance provided that portions of such railroad should not be constructed until certain highways should be re-located, changed, or altered by such railroad company, and the obligation of repairing or maintaining the whole or any part of such highways devolves by law upon any person or corporation other than the town, city, or borough within which such highway may be located, such provision of said Commissioners shall be binding upon said railroad company, and it shall be the duty of said railroad company to maintain and repair said highway so re-located, altered, or changed, in the same manner and to the same extent that such other person or corporation was bound to repair and maintain the same before such re-location, change, or alteration. For the purposes of this and the two preceding sections, land may be acquired in the manner provided by law for the taking of land by railroad companies. Any such rail-

road company may use the material and abutments of any existing bridge, in the old highway, in the construction of a bridge in the substituted highway, and shall provide suitable temporary accommodations for public travel over the old highway until the new highway is completed, and shall be solely responsible for injuries resulting from its negligence in the matter of such temporary accommodations. The selectmen of any such town are hereby authorized to discontinue such parts of the old highway as in their judgment are not of common convenience and necessity.

[The following section is repealed by Chapter 220, Sec. 9, Acts of 1889: SEC. 3489. The selectmen of any town, the mayor and common council of any city, the warden and burgesses of any borough, within which a highway crosses or is crossed by a railroad, or the directors of any railroad company whose road crosses or is crossed by a highway, may bring their petition in writing to the Railroad Commissioners, therein alleging that public safety requires an alteration in such crossing, its approaches, the method of crossing, the location of the highway or railroad, or the removal of obstructions to the sight at such crossing, and praying that the same be ordered. Whereupon the Railroad Commissioners shall appoint a time and place for hearing the petition, and shall give such notice thereof as they judge reasonable, to said petitioner, the railroad company, and to the owners of the land adjoining such crossing, and after such notice and hearing said Commissioners shall determine what alterations or removals shall be made, by whom done, and at whose expense.]

SEC. 3490. In case the party by whom the changes are to be made cannot agree with the owner of the land or other property to be removed or taken under the said decision of the Railroad Commissioners, the damages shall be assessed in the same manner as is provided in case of land taken by railroad companies, the expense of such assessment to be paid in the same manner as the expense of the alterations.

SEC. 3491. The decision of the Commissioners shall be communicated to the petitioners, to the railroad company, and to the owners of any property directed to be removed or taken, within twenty days after final hearing, and any person aggrieved by such decision may appeal therefrom in the same manner and with like effect as is provided in the case of appeals from any order of the Railroad Commissioners upon any proceedings relative to the location, abandonment, or changing of depots or stations.

SEC. 3492. The Railroad Commissioners are empowered and authorized to order any railroad company not to use for switching purposes, nor for standing trains of any kind, such portion of its tracks upon or across any

1876, ch. 36.

1877, ch. 8.

Proceedings to
secure safety of
highway at
railroad cross-
ings.

1876, ch. 36.

Assessment of
damages.

1876, ch. 36.

1877, ch. 8.

Appeal.

1884, ch. 100.

Commissioners
may forbid the
use of certain
tracks for
switching pur-
poses, etc.

public street or highway as in their opinion the public convenience requires should not be so used, and may limit the number of tracks, other than main tracks, which a railroad company may lay upon or across a public street or highway for side tracks or for switching purposes, and may order a railroad company to remove such of the side tracks or switching tracks now laid upon or across any public street or highway as said Commissioners may deem public convenience or safety requires should be removed.

1884, ch. 100.
Upon petition,
etc., commis-
sioners may
make orders
regulating the
use of tracks
for switching.

SEC. 3493. Said Commissioners, when requested in writing by the selectmen of any town, the mayor and common council of any city, or the warden and burgesses of any borough, to forbid the use for switching purposes of the tracks of any railroad company where the same cross any public street or highway within said town, city, or borough, shall visit such crossing, first giving reasonable notice to the authorities making such request, and, if public convenience requires, shall order the company operating said railroad not to use the same or such part thereof as may be specified in said order for switching purposes, and may make any order regulating such switching that they shall deem proper, and, upon like application and notice, shall make such orders in regard to the laying of railroad tracks for side tracks or for switching purposes upon or across such streets or highways, or for the removal of such tracks already laid, as they may judge proper. Said Commissioners may change any such order when they deem it necessary, first visiting said town, city, or borough, and giving the authorities thereof an opportunity to be heard thereon.

1884, ch. 100.
Penalty for non-
compliance
with order.

SEC. 3494. Any railroad company neglecting or refusing to obey any order of the Railroad Commissioners provided for in the two preceding sections, shall forfeit to the town in which such crossing is situated, one hundred dollars for each and every month of such non-compliance.

1884, ch. 100.
Appeals from
such order.

SEC. 3495. When said Commissioners, on application as prescribed in section 3493, shall make an order as provided therein, or refuse to make the same, their decision shall be communicated to the parties in interest within twenty days from the final hearing on the same, and either party aggrieved by such decision may appeal therefrom to the Superior Court in the manner and with the like effect as provided for appeals in section 3518, and the Superior Court may, at any time, upon application of either party, with due notice to adverse parties, amend or change any order passed as aforesaid.

SEC. 3496. When any railroad company shall fail to comply with any order of the Railroad Commissioners regarding any highway crossing, or any order of said Commissioners made in pursuance of the laws of this State, for which failure no other penalty is provided, said railroad company shall forfeit to the town within which is situated that portion of the railroad in reference to which the order is made, the sum of one hundred dollars for every such failure, to be recovered in an action to be brought within sixty days after the right of action shall accrue.

1884, ch. 53.
General penalty
in absence of
special penalty.

SEC. 3497. All forfeitures, not otherwise provided for, accruing to the State from any railroad company by reason of any neglect or refusal to comply with the orders of the Railroad Commissioners, shall be recovered by the Treasurer of the State in an action upon the respective statutes providing for such forfeitures.

1884, ch. 53.
Forfeitures
how recovered.

SEC. 3498. The Railroad Commissioners are empowered to make orders for the regulation of the speed at which railroad locomotives and cars shall cross streets and highways; and orders regulating the obstruction of streets and highways by railroad locomotives and cars; and generally to make any and all orders regarding the crossing of streets and highways by railroad locomotives and cars, that the public may be inconvenienced as little as possible thereby. Every railroad company which shall violate any such order, shall forfeit to the State fifty dollars for each day of such violation.

1883, ch. 106.
Commissioners
may regulate
the speed of cars
at crossings,
etc.; general
authority regard-
ing cross-
ings.

Penalty.

SEC. 3499. When any railroad is crossed by a highway on a level therewith, the company operating said railroad shall, at its own expense, so guard or protect its rails by plank, timber, or otherwise as to secure a safe and easy passage across its road. And if the selectmen of any town, the mayor of any city, or the warden of any borough shall represent in writing to the Railroad Commissioners that any company has failed to comply with the requirements of this section in regard to any highway within their town, city, or borough respectively, said Commissioners shall examine said crossing and make such order as they may deem necessary to carry out the provisions of this section.

1884, ch. 35.
Guarding rails
at grade cross-
ings.

SEC. 3500. All covered bridges constructed on the line of any railroad shall not be less than eighteen feet in height from the top surface of the rail laid in the track on the bridge to the underside of the crossbeams overhead.

G. S. 1875, 324,
§ 33.
Covered
bridges, height
of.

Chapter CCXV.

RAILROAD BRIDGES AND BRIDGE GUARDS.

SECTION.

3501. Railroad companies to erect bridge guards.
 3502. Penalty for neglect.
 3503. Footways upon railroad bridges.
 3504. Cattle-guards.
 3505. Fences.
 3506. Commissioners may make orders relative to fences.
 3507. Penalty for neglect.

1878, ch. 101.
 Railroad companies to erect bridge guards.

1878, ch. 101.
 Penalty for neglect.

G. S. 1875, 324,
 § 34.

Footways upon railroad bridges.

SECTION.

3508. When duty of adjoining owner is neglected.
 3509. When fence is to be maintained jointly.
 3510. Roads operated by trustees.
 3511. State's Attorney to complain, if company neglect to repair highway.
 3512. Taking land to make changes recommended.

SEC. 3501. Every railroad company shall, if required by the Railroad Commissioners, erect and thereafter maintain suitable bridge guards at every bridge over its railroad less than eighteen feet in height above the tracks; such bridge guards to be approved by the Railroad Commissioners, and to be erected and adjusted to their satisfaction.

SEC. 3502. Every railroad company refusing or neglecting to comply with the provisions of the preceding section shall, for each month of continuance in such refusal or neglect, forfeit and pay to any person who shall sue therefor, the sum of fifty dollars.

SEC. 3503. When, in the opinion of the selectmen of any town, or of the common council of any city, a footway upon the line of any railroad bridge or causeway within the limits of such town or city would be of public convenience, and the railroad company owning such bridge or causeway shall not consent thereto, such selectmen or common council may call out the Railroad Commissioners, who, after due notice to such company, shall inquire into the facts, at the expense of such town or city. And if said Commissioners shall find that a footway along such bridge or causeway would be of public convenience, they shall authorize such town or city to construct or maintain the same at their own expense, and to attach the same for support to such bridge or causeway; *provided*, such footway be constructed entirely outside of the bridge or causeway to which it is attached, and so constructed, used, and maintained as not to interfere with the necessary and proper use of such bridge or causeway of such company.

FENCES.

G. S. 1875, 326,
 § 45.

SEC. 3504. Every railroad company shall construct suitable cattle-guards and fences therefrom at all crossings of passways or highways, to prevent cattle from

passing upon its railroad, except when the Railroad Commissioners deem it unnecessary.

SEC. 3505. Every railroad company shall erect and maintain fences on the sides of the railroads operated by it at such place or places as the Railroad Commissioners shall direct; and every railroad company operating any railroad constructed under any act of incorporation passed since the first Wednesday of May, 1850, or hereafter constructed, shall cause sufficient fences to be erected and maintained on the sides of such railroads, except at such place or places as the Railroad Commissioners shall adjudge them unnecessary; such fences to be erected by all companies hereafter organized, within twelve months after they enter upon and take possession of the lands through which their railroads pass.

Section 3506 of the general statutes is hereby amended to read as follows: Said Commissioners shall make special investigation as to the necessary condition of the fences on the line of any railroad, when so requested in writing, and when deemed necessary shall issue their order directing the company operating said railroad to erect or repair said fences. Said order shall specify the place or places, the manner in which and the time within which the fence is to be erected or repaired, which order shall be served upon said company by some indifferent person by leaving with its secretary, or at his usual place of abode, a true and attested copy thereof within six days from its date, or by depositing within said time such copy, postage paid, in the post-office for transmission by registered letter, addressed to such secretary, at his office.

SEC. 3507. If any railroad company shall neglect to comply with any such order it shall forfeit to the State one hundred dollars per month for each and every month of such neglect. The Railroad Commissioners shall give notice of all such forfeitures to the State Treasurer, who shall collect the same. And any person who, without neglect on his part, shall suffer damage by reason of the neglect of any railroad company to erect or maintain fences as required by law, may recover such damage from such company.

SEC. 3508. When it shall be the duty of the owner of land adjoining any railroad to erect or maintain a fence between said land and said railroad, and such owner shall have unduly neglected to erect or maintain the same, and it shall have been erected or maintained by the railroad company in conformity to the order of the Railroad Commissioners, said company may collect the

1881, ch. 66.
Fencing of railroads.

1893, ch. 210.
Commissioners may make orders relative to fences.

1881, ch. 66.
Penalty for neglect.

1881, ch. 66.
When the duty of owner of adjoining land to maintain fence is neglected.

cost of erecting and maintaining such fence from such owner. Such cost shall be a lien in favor of such company on said land, and it shall take precedence of every other lien or incumbrance on said land, and may be foreclosed in the same manner as a mortgage lien, but shall not continue in force unless said company shall, within sixty days after the completion of said fence, lodge a certificate with the town clerk of the town in which said land is situated, describing said land and specifying the amount claimed as a lien thereon, and the dates of the commencement and completion of said fence, which certificate shall be recorded by said town clerk on the land records of said town.

1881, ch. 66.
When fence is
to be main-
tained jointly.

SEC. 3509. When by contract neither the owner of such land nor the railroad company can oblige the other to erect or maintain the fence, or such owner or his grantor has agreed not to require the railroad company to erect or maintain such fence, and the same shall have been so erected or maintained by any company by order of the Railroad Commissioners as aforesaid, said railroad company may collect one-half of the cost of erecting and maintaining the same from such owner, and the same shall be a lien on the lands of such owner as provided in the preceding section.

1886, ch. 77.
Use of barbed
wire regulated.

SEC. 2274. No barbed wire shall be used within five feet of the ground along any sidewalk or public highway, without the written consent of a majority of the selectmen of the town, the members of the common council of the city, or the warden and burgesses of the borough in which such sidewalk or highway is situated.

1889, chap. 126.
Barbed wire not
to be used on
fences between
adjoining prop-
rietors.

SECTION 1. No person or corporation shall make use of any barbed wire in the construction of fences, or have any barbed wire upon existing fences between their own premises and those of any adjoining proprietor, within twenty-five rods of any house or barn belonging to such proprietor, without first obtaining his written consent thereto.

Penalty.

SEC. 2. Any person or corporation who shall violate the provisions of this act shall be fined not more than one hundred dollars.

1889, ch. 143.
Barbed wire
fence not to be
used on grounds
of school or
other public
building.
Penalty.

SECTION 1. No barbed wire shall be used in the construction of fences, or retained upon existing fences, connected with or enclosing the grounds of any public school or other public building in this State.

SEC. 2. Any person who shall violate the provisions of this act shall be fined not more than one hundred dollars.

Sec. 3510. When any railroad shall be operated by ^{1881, ch. 66.} a trustee or trustees, the duties and liabilities imposed ^{Roads operated by trustees.} and the right conferred by the five preceding sections upon companies operating railroads are hereby imposed and conferred upon such trustee or trustees. All orders of the Commissioners upon such trustees shall be served by leaving a true and attested copy of such order with or at the usual place of abode of one of such trustees, by some indifferent person, within six days of the date thereof.

Sec. 3511. When any railroad company shall neglect to construct any highway or bridge which it is its ^{G. S. 1875, § 326, § 46.} duty to construct, or to keep in repair any bridge, embankment, filling, or abutment, which it is its duty to maintain, the State's Attorney in any county wherein such neglect exists, or in which the whole or any part of said highway or bridge is situated, shall make complaint thereof to the Superior Court for such county, which shall proceed in the same manner against said railroad company as is required against towns neglecting to construct any road laid out by the Superior Court, or to keep in repair any public road within their limits, which it is their duty to construct or keep in repair.

Sec. 3512. When the Railroad Commissioners shall recommend to any railroad company that any changes or alterations ought to be made in the roadway or bridges of such railroad company, in order to make the same safer and more permanent, and, to carry out such recommendation it shall be necessary for such company to acquire any property or estate, or any interest in or to the same, such company may condemn and take such property, estate, or interest, in the same manner as is provided for taking, appraising, and paying for land, in section 3464. ^{1887, ch. 30. Taking of property by railroad companies in certain cases.}

Chapter CCXVI.

DEPOTS.

SECTION.	SECTION.
3513. When railroad trains to stop near villages.	3517. Abandoned stations how re-established.
3514. Stations, how established on petition to judge of Superior Court.	3518. Appeals from Railroad Commissioners.
3515. Security for compensation of engineer.	3519. Application to Superior Court to compel stoppage of trains at depots.
3516. Stations not to be abandoned, without approval of Commissioners.	3520. Hearing before committee.
	3521. Report of committee.
	3522. Order of court, how enforced; costs.

G. S. 1875, 326,

§ 47.

When railroad
trains shall stop
near villages.

SEC. 3513. When the business center of any village containing two hundred inhabitants is more than one and a half mile from the nearest station on a railroad, and not more than one-third of a mile from said road, the Railroad Commissioners, upon the petition of twenty of said inhabitants, after due inquiry, may make such orders in regard to the stoppage of any of the trains upon said railroad, at or near said village, for the purpose of receiving and discharging passengers and freight, as they shall deem just and reasonable; and no railroad company whose trains may be thus required to stop, shall charge more than five cents for each mile and fraction of a mile, for transporting passengers between such stopping place and the next station.

G. S. 1875, 327,

§ 48.

Stations, how
established.

SEC. 3514. When twenty electors shall present their petition to a judge of the Superior Court alleging that the managers of any unfinished railroad ought to establish a station at or near a place named, and that they have reason to fear that said managers do not intend so to do, he shall, after due notice to said managers, appoint a practical engineer skilled in the construction of railroads, who, after being duly sworn, shall, with the Railroad Commissioners, hear said petition, after due notice to all parties in interest; and if on such hearing said Commissioners concur with said engineer in finding such petition true, they shall in writing designate the place within the limits embraced in said petition, where said company shall establish and maintain a suitable station; and said company shall establish and maintain said station at such place; if the Commissioners shall concur with said engineer in finding said petition untrue, they shall dismiss the same; and if said engineer shall not concur with said Commissioners, he and they shall each make a written report of the facts found by them, respectively, and of their respective opinions thereon, to said judge, who shall thereupon make such order as, upon an examination of said reports, he may deem reasonable; and any order so made by him against said company shall be binding upon it.

Petition to be
dismissed if
found untrue;
engineer and
commissioners
to make separate
reports if
they disagree.

G. S. 1875, 327,

§ 49.

Security for
compensation
of engineer.

SEC. 3515. Said judge may at any time require said petitioners, on penalty of dismissal of their petition, to give such security as he shall order for the payment of such fees and expenses of said engineer as shall be taxed by him after due hearing of the parties thereon, which shall be paid by the petitioners; but if said judge shall so order, the whole or a part thereof shall be refunded by said company to the petitioners.

G. S. 1875, 327,

§ 50.

SEC. 3516. No railroad company shall abandon any

station on its roads, in this State, after the same has been established for twelve months, except with the approval of the Railroad Commissioners, given after a public hearing held at such station, notice of which shall be posted conspicuously in said station for one month previous to the hearing.

Stations not to be discontinued without approval of commissioners.

SECTION 1. Whenever the directors of any railroad company shall change the location of the track of any railroad owned or leased by such company, for the purpose of improving the line of the railroad, and shall desire to abandon the former line, and there shall be any railroad station upon the line which it is proposed to abandon, such directors may apply in writing to the Railroad Commissioners for authority to abandon the use of such station after a new station has been provided at some convenient point upon the new line of such railroad.

1889, ch. 90.
Abandonment of railroad station, the line changed.

SEC. 2. Whenever an application is made to the Railroad Commissioners under the provisions of the foregoing section, they shall fix a time and place for a hearing in relation to the same, and they shall give notice of the same by causing to be posted at least thirty days before the time of such hearing, in the railroad station which it is proposed to abandon, a copy of such application and order of notice.

Notice of hearing.

SEC. 3. The Railroad Commissioners shall have power, upon any application brought and heard under the preceding sections, to fix the location of a new station upon the new line of railroad, and when such new station has been constructed and opened for the use of the public, the railroad company in whose behalf the application is brought may abandon the old station.

Fixing of new location.

SEC. 3517. Any station on any railroad in this State, which was abandoned between the first day of January and the fourth day of July, 1866, shall upon the petition to the Railroad Commissioners of thirty freeholders residing in the town where such station was located, be restored, upon the approval of said Commissioners given after a public hearing held at the station nearest to said abandoned station, and after notice of said hearing shall have been conspicuously posted at the place of hearing for one month previously to the hearing.

G. S. 1875, 327, § 51.
Abandoned stations how re-established.
37 Conn., 153.

SECTION 1. Whenever any railroad station, freight or passenger, on any railroad in this State, shall be destroyed or materially damaged from any cause, and

1893, ch. 165.
Stations destroyed, how rebuilt.

thereby rendered unsuitable for use, it shall be the duty of the railroad company owning the same to rebuild or repair said station within a reasonable time.

When company neglects.

SEC. 2. If said railroad company shall neglect to rebuild or repair any station destroyed or damaged within a reasonable time, the Railroad Commissioners shall make such order regarding the rebuilding or repairing of the same as they shall deem just and proper, and said order may be enforced by mandamus brought in the name of the State.

SEC. 3. This act shall take effect upon its passage.

G. S. 1875, 327,
§ 52.

Appeals from
Railroad Com-
missioners.
1889, chap. 213.

SEC. 3518. Any person aggrieved by any order of the Railroad Commissioners, upon any proceeding relative to the location, abandonment, or changing of depots or stations to which he was or ought to have been made a party, may appeal from the same to the Superior Court of the county in which the cause of appeal shall arise, within thirty days after the publication of such order, by a petition in writing with a proper citation signed by competent authority to all parties to said proceedings having an interest adverse to him, to be served upon them at least twelve days before the return day; and said court may hear said appeal and reexamine the question of the propriety and expediency of the order appealed from, either by itself or a committee, and shall proceed thereon in the same manner as upon complaints for equitable relief; and in case said order is not affirmed, may make any other order in the premises that it may deem proper and which might have been made by the Railroad Commissioners therein, and may award costs at its discretion. Such appeal shall be a *supersedeas* of the order appealed from until the final action of the court thereon, and said final order may be enforced by said court by attachment, mandamus, or otherwise, as it shall deem proper.

G. S. 1875, 328,

§ 53.

Application to
Superior Court
to compel com-
panies to stop
passenger
trains at depots.

SEC. 3519. When any railroad company in this State shall refuse to stop any of its passenger trains at any station, ten freeholders of the town in which such station is situated may make their application in writing to the Superior Court, and if said court is not in session, to any judge thereof, praying that said company may be ordered to stop the train or trains mentioned in said application at said station, to which application a citation shall be annexed, and the same shall be served upon such company at least six days before the return day named therein.

G. S. 1875, 328,
§ 54.

SEC. 3520. Said court, or judge, as the case may be,

shall appoint a committee of three disinterested persons, who, being first duly sworn, shall hear and decide upon said application at such time and place and with such notice to those interested as said court or judge shall order; and if said committee shall be of opinion that said application ought to be granted, they may order said company to stop its train or trains in the manner prescribed in said order, and make such other order as they shall deem just and reasonable, and shall make return of their doings to the next session of said court.

SEC. 3521. Upon such return, either party may object to the acceptance of the same for irregularity or improper conduct, and the court for such cause may set it aside and order a rehearing; but if the court accept the same it shall be conclusive, and said company shall obey said order.

SEC. 3522. Said order may be enforced by mandamus, and the costs of said proceeding may be taxed by said committee against either or both of said parties.

Hearing before committee.

G. S. 1875, 328, § 55. Report of committee.

G. S. 1875, 328, § 56. Order, how enforced; costs.

Chapter CCXVII.

OBLIGATIONS OF AND TO COMPANIES.

SECTION.

- 3523. Railroad trains on Sunday restricted.
- 3524. Freight not to be handled on Sunday between certain hours.
- 3525. Penalty.
- 3526. Rates of fare on Sunday trains; penalty.
- 3527. Construction of preceding sections.
- 3528. Companies to use standard time.
- 3529. To afford each other mutual facilities.
- 3530. How compelled to make proper connections.
- 3531. To maintain safe approaches to stations.
- 3532. Trunk roads to afford equal facilities to intersecting roads.
- 3533. How to compel them to do this.
- 3534. Order by Commissioners as to railroad connections.
- 3535. All connecting roads to have equal facilities.
- 3536. Penalty.
- 3537. Freight cars to be provided with safety couplers.
- 3538. Such couplers to be approved by Commissioners.
- 3539. Penalty.
- 3540. Connecting aprons; hand-cars not to be left near crossings; drinking-water for passengers; baggage checks; names of depots to be posted up; designation of destination of trains.
- 3541. Fraudulent evasion of payment of fare.
- 3542. Change in commutation fares.
- 3543. Transportation of milk.
- 3544. Penalty for refusing to transport milk.
- 3545. Freight charges for shorter distance not to exceed charges for longer distance.
- 3546. Penalty.
- 3547. Penalty for refusing to transport material for repair of another road.

SECTION.

- 3548. Penalty for refusing to give receipt.
- 3549. Certain employees to wear badges.
- 3550. Trespassers on cars or track, and on platform at station.
- 3551. Complaint by railroad agents.
- 3552. Punishment.
- 3553. Engines, bells, and whistles.
- 3554. To be sounded at crossings.
- 3555. May be sounded by assistant engineer or fireman.
- 3556. Commissioners may require sounding of whistle at crossings.
- 3557. Engineers to have copies of this law, and be sworn to obey it.
- 3558. Blowing of whistle dispensed with when.
- 3559. Duty of companies in that case.
- 3560. Stopping trains at bridges and crossings.
- 3561. Penalty.
- 3562. Duty of Commissioners on complaint of interference with navigation by use of drawbridges.
- 3563. Stopping trains at depot near drawbridges.
- 3564. Switches at railroad junctions.
- 3565. Special order by Commissioners as to passing crossings without stopping.
- 3566. Number of brakemen required on a train.
- 3567. Companies to give notice to Commissioners of accidents, etc.
- 3568. Trains to be provided with hospital stretcher.
- 3569. Commissioners may make orders relative to heating and lighting cars, and report neglect to General Assembly.

- 1887, ch. 11.
Railroad trains
on Sunday
restricted.
- SEC. 3523. No railroad company shall run any train on any road operated by it within this State, between sunrise and sunset on Sunday, except from necessity or mercy; *provided*, that before ten o'clock and thirty minutes in the forenoon and after three o'clock in the afternoon it may run trains carrying the United States mail, and such other trains or classes of trains as may be authorized by the Railroad Commissioners of this State, on application made to them on the ground that the same are required by the public necessity, or for the preservation of freight.
- 1887, ch. 11.
Freight not to
be handled on
Sunday
between certain
hours.
- 1889, ch. 23.
- SEC. 3524. No railroad company shall permit the handling, the loading, or the unloading of freight on any road operated by it, or at any of its depots or stations within this State, between sunrise and sunset on Sunday, except from necessity or mercy; *provided, however*, that the Railroad Commissioners of this State may suspend the operation of this section, so as to permit the handling, the loading, or the unloading of freight by transfer of said freight between steamboats and cars, until eight o'clock in the forenoon, at any depot or station where, upon application made to them, they shall find that the same is required by the public necessity or for the preservation of freight.
- 1887, ch. 11.
Penalty.
- SEC. 3525. Every railroad company which shall violate any of the provisions of the two preceding sections shall forfeit to the State the sum of two hundred and fifty dollars for any such violation.
- 1887, ch. 11.
Rates of fare on
Sunday trains.
- SEC. 3526. No railroad company shall transport passengers on Sunday upon any train deemed necessary according to the intent of section 3523, for less than the highest regular fare collected on week days, and no commutation, special bargain, or season or mileage ticket shall include or provide for any travel on said day, under penalty of a forfeiture to the State of fifty dollars for each and every violation of this provision.
- Penalty.
- 1887, ch. 11.
Construction of
preceding
sections.
- SEC. 3527. The provisions of the four preceding sections shall not affect statutes which prohibit secular work or recreation on Sunday, except so far as they may be found in their operation to be inconsistent with them.
- 1883, ch. 54.
Railroad com-
panies to use
standard time.
- Penalty.
- SEC. 3528. Every railroad company in their public advertisements and time tables shall make use of the standard time of this State for all stations within the State, and every railroad company which violates this section shall forfeit to the State twenty-five dollars.

SEC. 3529. Every railroad company shall run its trains each way for passengers at such times and in such manner as to afford reasonable facilities for receiving passengers from, and delivering them to the other railroads in this State, connected therewith; and when the business connections of the railroad of any company with the railroad of any other company are not convenient and reasonable for the accommodation of passengers over said road, said company shall make such connections as the public travel and business may require.

G. S. 1875, 328,
§ 57.
Companies to
afford each
other mutual
facilities.

SEC. 3530. Any person who shall be aggrieved by the neglect of any railroad company to make such connections, may prefer a petition against such company to any judge of the Superior Court, who is not a resident of the county in which the grievance complained of exists, averring such neglect, which petition shall be served upon the respondents at least twelve days before it is made returnable; and said judge shall, by himself or by a committee, inquire into the allegations of the petition, after such notice of the hearing as he shall order, and, if the allegations in the petition are found to be true, shall order such company to make such connections, on penalty of forfeiting to the petitioner not less than fifty dollars for each day that it shall fail to comply with said order; and in such case the judge may tax costs at his discretion, and issue execution therefor.

G. S. 1875, 328,
§ 58.
How compelled
to make proper
connections.

SEC. 1. Any person claiming to be aggrieved by the neglect of any railroad company or companies to make connections, as provided in section 3529 of the general statutes, may, upon the written approval of the selectmen of any town through which such railroad passes, bring his petition in writing to the Railroad Commissioners, averring such neglect, whereupon said commissioners shall appoint a time and place for hearing the same and give reasonable notice thereof to said petitioner and to the railroad company or companies, and after such hearing said Commissioners shall make such order relating to such connection as they shall find to be practicable and reasonable.

1889, ch. 131.
Complaints
against railroad
for neglect to
make
connections.

SEC. 2. The Railroad Commissioners shall communicate their decision to the petitioner and to the railroad company or companies within twenty days after the final hearing, and any railroad company failing to comply with such order within ten days after receiving notice of said decision shall forfeit fifty dollars, half to

Company
failing to
comply with
order of Rail-
road Commis-
sioners.

the petitioner and half to the State, for each day that it shall fail to comply with said order after the expiration of ten days from the time of receiving said notice.

Repeal.

SEC. 3. All acts and parts of acts inconsistent herewith are hereby repealed.

1883, ch. 84.
Providing safe
approaches to
railroad
stations.

SEC. 3531. Every railroad company shall maintain a safe approach for carriages to all its passenger stations from a contiguous or neighboring highway, and shall not permit such approach to be obstructed in any manner for a reasonable time before and after the arrival of every passenger train stopping at such station. The Railroad Commissioners are empowered to make such orders as they deem necessary and reasonable in each case to which their attention is called. Every railroad company violating such an order of the Railroad Commissioners shall forfeit to the State one hundred dollars for every day that such order is violated.

Penalty.

G. S. 1875, 329,
§ 59.
Trunk roads to
afford equal
facilities to in-
tersecting
roads.

SEC. 3532. When the railroad of any company, being a trunk road, shall, at or near the same place, connect with or be intersected by two or more other railroads, which are competing lines for the business to or from such trunk railroads, equal facilities, including price and rates, shall be afforded by the company operating said trunk road to each of said competing roads in the interchange of cars and transportation of freight, as well as in ticketing passengers and checking baggage.

G. S. 1875, 329,
§ 60.
How to compel
companies to
furnish such
facilities.

SEC. 3533. If any such competing railroad company shall at any time deem itself aggrieved in reference to such facilities, its managers may complain to the Railroad Commissioners, who, after due notice and hearing, shall prescribe such regulations as will, in their judgment, secure reasonable facilities for the accommodation of the business of each of said connecting railroads, and fix the terms on which such facilities shall be afforded by or to each of said railroad companies; and the Superior Court may compel the performance thereof, by attachment, *mandamus*, or otherwise, and the expenses of the proceedings shall be paid by said parties, as shall be determined on by said court.

G. S. 1875, 329,
§ 61.
Order by Rail-
road Commis-
sioners as to
connections to
be made.

SEC. 3534. When it shall appear to the Railroad Commissioners, by the written complaint of the president, or a majority of the directors, of any railroad company in this State, or a majority of the selectmen of any town through which any railroad passes, that the business connections of any other railroad connected with such railroad are not convenient and reasonable for the accommodation of the inhabitants on the line of such

road, said Commissioners shall forthwith cause a notice to be given to all parties interested, specifying the time and place of hearing such complaint, and on such hearing, if good and sufficient cause exist, shall make such regulations in relation thereto as they shall deem proper; and any railroad company neglecting to comply with such regulations shall forfeit to the State twenty-five dollars for each day of such neglect.

SEC. 3535. Every railroad company owning or operating any railroad, located wholly or in part within this State, which connects with any other railroad in this State, shall receive, and with reasonable dispatch draw over the same, the passengers, merchandise, and cars of the company owning or operating such connecting railroad, and shall not in any manner discriminate as to time and price for such hauling against said connecting railroad in favor of other shippers at said point of connection; and if any such company shall fail so to do, complaint may be made thereof by such connecting railroad to the Railroad Commissioners, who, after reasonable notice to such company complained of, shall, if upon a hearing they find the complaint true, order such company to receive and forward as herein provided for, such passengers, merchandise, and cars as may be delivered to it by said connecting railroad.

G. S. 1875, 329,
§ 62.
All connecting
roads to have
equal facilities.

SEC. 3536. Every railroad company refusing to conform to any order made, as specified in the preceding section, shall be fined twenty-five dollars.

G. S. 1875, 330,
§ 63.
Penalty.

SEC. 3537. Every railroad company operating any railroad located partially or wholly in this State, shall cause every freight car that shall be built or purchased for use on such railroad, to be provided with couplers so arranged as to render the presence of any person between the ends of the cars unnecessary for the purpose of coupling the same.

1882, ch. 55.
Freight cars to
be provided
with safety
couplers.

SEC. 3538. No couplers shall be placed on any freight cars built or purchased as specified in the preceding section, nor shall any new couplers be substituted for any in use, until the same shall have been approved by the Railroad Commissioners, and such couplers shall be hung at such height above the face of the railroad track as shall be designated by such Commissioners.

1882, ch. 55.
Such couplers
to be approved
by Railroad
Commissioners.

SEC. 3539. Every railroad company which shall permit a violation of the two preceding sections, shall forfeit to the State for every such violation the sum of fifty dollars.

1882, ch. 55.
Penalty.

SEC. 3540. Every railroad company shall provide its passenger, baggage, mail, and express cars with suitable

G. S. 1875, 330,
§ 64.

Connecting aprons.	platforms to secure the safety of persons passing from car to car, or connecting aprons or bridges, to the approbation of said Commissioners, except that freight or baggage cars need not be thus connected with the platform of a passenger car attached to a freight train; shall
Hand-cars.	not allow any hand-car, or other car not moved by steam belonging to it, and used upon its railroad, when removed from the railroad track (except when placed in a building prepared for it), to remain within fifty feet of any road or highway crossing said track; shall carry in each passenger car, in a tank or other suitable appurtenance, a sufficient quantity of good drinking water for
1889. Drinking water.	the free use of the passengers, with a clean tumbler or cup for using it; or instead thereof shall carry through each passenger car, once an hour, a suitable quantity of good drinking water for the free use of the passengers, with suitable appurtenances for carrying it, and a clean glass tumbler for using it; shall give each passenger, who shall be separated from his baggage by said com-
Checks for bag- gage.	pany, a receipt or check for it at the time of receiving it; and shall conspicuously post on each passenger depot building the name of the station, and on each passenger car which leaves the <i>termini</i> of their own or any other road, a legible card or cards, not less than three feet in length, with large letters, distinguishing way from express trains, and designating the direction in which the trains are next to move, unless such cards shall be dispensed with by the Commissioners.
Name of sta- tion.	
Designation of way and ex- press trains.	

1893, ch. 106.
Late trains,
when bulle-
tined.

SECTION 1. The Railroad Commissioners shall, whenever requested by twenty legal voters residing within two miles of any railroad station on any railroad in this State, or by the mayor of the city, the first selectman of the town, or the warden of the borough in which said station is located, issue an order commanding the railroad company owning such station to bulletin the arrival and departure of all trains over ten minutes late, together with a statement of the cause of the delay of said trains.

Orders not to be
rescinded, ex-
cept.

SEC. 2. No such order shall be rescinded except after hearing by said Railroad Commissioners held at or near such station, of which hearing reasonable notice by mail shall be given to at least five signers of such request.

Penalty.

SEC. 3. Any railroad company failing to comply with any such order shall be subject to the penalties prescribed in section 3424 of the general statutes.

SEC. 3541. No person shall fraudulently evade or attempt to evade, the payment of any fare lawfully established by a railroad company, and whoever does not, upon demand, first pay such fare, shall not be entitled to be transported over any railroad; but conductors or employes of railroad companies shall not put a passenger off from trains between stations.

G. S. 1875, 330,
§ 65.
Penalty for
fraudulently
evading pay-
ment of fare.

SEC. 3542. No railroad company which has had a system of commutation fares in force for more than four years shall alter or abolish it, except for the regulation of the price charged for such commutation; and such price shall, in no case, be raised to an extent that shall alter the ratio as it existed on the first day of July, 1865, between such commutation and the rates then charged for way fare, on the railroad of such company.

G. S. 1875, 330,
§ 66.
Change in
commutation
fares.

SEC. 3543. Every railroad company shall transport milk for every person by the same trains and upon the same conditions as it transports milk for any other person.

G. S. 1875, 330,
§ 67.
Transportation
of milk.

SEC. 3544. Every railroad company which shall willfully refuse to transport milk for any person according to law, shall forfeit twenty dollars to him who shall sue therefor.

G. S. 1875, 530,
§§ 41, 42.
Penalty for re-
fusing to trans-
port milk.

SEC. 3545. No railroad company shall charge or receive for the transportation of freight to any station on its road a greater sum than is at the time charged or received for the transportation of the like kind and quantity of freight from the same original point of departure, and under similar circumstances, to a station at a greater distance on its road in the same direction. Two or more railroad companies whose roads connect shall not charge or receive for the transportation of freight to any station on the road of either of them a greater sum than is at the time charged or received for the transportation of the like kind and quantity of freight from the same original point of departure and under similar circumstances to a station at a greater distance on the road of either of them in the same direction. In the construction of this section the sum charged or received for the transportation of freight shall include all terminal charges; and the road of a company shall include all the road in use by it, whether owned or operated under a contract or lease.

1885, ch. 82.
Freight charges
for shorter dis-
tance not to be
more than for a
longer distance.

SEC. 3546. Every railroad company which violates any provision of the preceding section, in addition to the liability for all damages sustained by reason of such violation, shall forfeit two hundred dollars, to be recovered to his own use, by the party aggrieved, or to the use of

1885, ch. 82.
Penalty.

the State by the State's Attorney of the county in which such violation was committed, but no action for any such forfeiture shall be maintained unless the same is brought within one year from the date of such violation.

1879, ch. 115.
Penalty for refusing to transport material for repair of another road.

SEC. 3547. Every railroad company which shall refuse to transport over the line of its road any railroad ties, sleepers, or material to be used in the construction or repair of any other railroad, at the same rate or price as other freight of the same class, shall forfeit not less than fifty nor more than three hundred dollars, half to him who shall sue therefor, and half to the State.

G. S. 1875, 530, § 45.
Penalty for refusing to give receipt.

SEC. 3548. Every railroad company which shall refuse to give a receipt to the owner or shipper of any commodity delivered to it for transportation, describing such commodity, shall forfeit to such owner or shipper fifty dollars.

1889, ch. 212.
Railroad company not to charge for detention of cars in loading or unloading.

SEC. 1. No railroad company, owning or operating any railroad in this State, shall claim, demand, or collect from any shipper or consignee of merchandise or freight, any sum, damage, or charge for the delay or detention of cars in loading or unloading the same, for any period of less than four consecutive days, Sundays and legal holidays excluded; such four days to be computed from the time the cars shall be accessible to the shipper or consignee for the purpose of loading and unloading the same.

Nor to collect for storage for time less than two days.

SEC. 2. No railroad company shall claim, demand, or collect from any consignee of merchandise or freight, any sum or charge for the storage of any merchandise or freight in any freight house, or warehouse, or other structure, for any period less than two consecutive days, Sundays and legal holidays excluded; such two days to be computed from the time of the arrival of such merchandise or freight at the place of delivery. Any railroad, violating this or the preceding section, shall forfeit double the amount collected to any person suing therefor.

Nor to have lien for freight or advances, unless.

SEC. 3. No railroad company shall have any lien upon any merchandise or freight carried or transported by such railroad company for any charges for carrying such freight, or for any advances upon freight so carried or transported, unless such railroad company shall, upon request, deliver to the consignee of such freight or his agent, for his own use, a copy of the bill or statement of such charges and advances as the same appears upon the way-bill held by such company.

SEC. 3549. All the conductors, brakemen, and bag-gagemen, employed upon the passenger trains of any railroad company, shall wear, when on duty, in a conspicuous place, a badge denoting their respective duties, and the name of such company.

G. S. 1875, 330, § 68.
Certain employees to wear badges.

SEC. 3550. No person shall, without the permission of the managers of the railroad, be upon, or attach himself to, any engine or car upon the track of any railroad, or occupy any part of the platform or grounds of any railroad station, nor ride, drive, or lead any beast on said track, except for the purpose of crossing it.

G. S. 1875, 330, § 69.
Being on car platforms or grounds, or driving on track.

SEC. 3551. Every station agent of any railroad company, who shall know or have immediate information that any person has violated any provision of the preceding section, shall forthwith notify a grand juror or other informing officer of the town in which said offense shall have been committed.

G. S. 1875, 330, § 70.
Agents of companies to make complaint.

SEC. 3552. Every person who shall violate any provision of the two preceding sections shall be fined not more than fifty dollars, or imprisoned not more than thirty days, or both.

G. S. 1875, 331, § 71.
Punishment.

SEC. 3553. Every engine used upon any railroad shall be supplied with a bell of at least thirty-five pounds weight, and a suitable steam whistle, which bell and whistle shall be so attached to such engine as to be conveniently accessible to the engineer, and in good order for use.

G. S. 1875, 331, § 72.
Engines to have bell and whistle.

SEC. 3554. Every person controlling the motions of any engine upon any railroad shall commence sounding the bell or steam whistle attached to such engine when such engine shall be approaching, and within eighty rods of the place where said railroad crosses any highway at grade, and keep such bell or whistle occasionally sounding until such engine has crossed such highway; and the railroad company in whose employment he may be shall pay all damages which may accrue to any person in consequence of any omission to comply with the provisions of this section; and no railroad company shall knowingly employ any engineer who has been twice convicted of violating the provisions of this section.

G. S. 1875, 331, § 73.
Engineers to sound bell or whistle when crossing highways, etc.

SEC. 3555. Every engineer in charge of a locomotive engine may direct and authorize any fireman or assistant engineer who is under his authority at the time, to perform the duties imposed upon such engineer by the preceding section, but nothing in this section shall be construed as relieving the engineer from any liability or responsibility.

1887, ch. 27.
Assistant engineer or fireman may sound bell or whistle at crossing.
Engineer's responsibility not relieved.

SEC. 3556. When it shall appear to the Railroad Commissioners, upon the written complaint of the select-

1882, ch. 94.
Commissioners may, upon com-

plaint, require sounding of whistle at crossing.

G. S. 1875, 331, § 74.
Engineers to have copies of this law and be sworn to obey it.

1881, ch. 41.
1886, ch. 40.
Blowing of whistle dispensed with, when.

1881, ch. 41.
Duty of companies.

G. S. 1875, 331, § 75.
Trains to stop before crossing drawbridge, or railroad crossing.

G. S. 1875, 331, § 76.
Penalty for violation.

men of any town, that public safety requires the sounding of the engine whistle at any highway crossing when the train passes over or under such highway, they shall make such order in relation thereto as they shall deem proper.

SEC. 3557. No railroad company shall permit any person to drive any engine upon any railroad operated by such company unless he shall have first received a printed copy of this section and of sections 3553 and 3554, and shall have made oath that he will faithfully comply with the provisions thereof.

SEC. 3558. When the selectmen of any town, the mayor and common council of any city, or the warden and burgesses of any borough, shall bring their petition in writing to the Railroad Commissioners, representing that the interests of the public require that the blowing of the locomotive whistle upon a railroad at certain points within the limits of such town, city, or borough, should be dispensed with, said Commissioners shall appoint a time and place for hearing said petition, and shall give reasonable notice thereof to the petitioners and the railroad company in question; and if after such hearing they shall be of opinion that the sounding of the whistle can be dispensed with, without danger to the public, they shall direct said railroad company to omit the same, and require any other signal which said Commissioners shall judge best in lieu thereof, at such points as they may specify.

SEC. 3559. When any railroad company shall receive such directions from the Railroad Commissioners, it shall thereafter omit the sounding of the whistle at the points named in said order.

SEC. 3560. All railroad trains shall be brought to a full stop, at a distance not less than two hundred feet, nor more than eight hundred feet, from the draw in every drawbridge upon the line of the railroad over which they are to be run, and from every point where such railroad is crossed by another railroad, and in plain sight of the same, before being run upon or over such draw or crossing; but the Railroad Commissioners may in writing authorize the passing of any draw or any railroad crossing, without stopping as aforesaid, when, in their opinion, it can be done consistently with public safety.

SEC. 3561. Every person running such a train, who shall violate the provisions of the preceding section, shall be fined not more than one hundred dollars, or imprisoned not more than three months; and the presi-

dent and directors of any railroad company who shall knowingly permit any violation of the same, shall be fined five hundred dollars.

SEC. 3562. It shall be the duty of the Railroad Commissioners to investigate any and all complaints made to them of interference with navigation in the uses of drawbridges over any navigable waters in this State, and to make such orders in reference thereto as will in their judgment remove, so far as possible, all just cause of grievance consistent with the rights of parties that may be affected thereby, and the public safety.

SEC. 3563. All trains which are obliged to come to a full stop before crossing any drawbridge, shall, when the Railroad Commissioners shall so order, stop at the regular station nearest to such drawbridge for a sufficient length of time to accommodate passengers who may desire to enter or leave said trains, if said station is in full view of said drawbridge, and not more than one hundred and twenty rods therefrom.

SEC. 3564. No railroad company shall permit any passenger train to be run over any switch, at any railroad junction of different roads, or any station where such train does not regularly stop, or is not then to be stopped, unless there be, at the time when such train shall arrive near such switch, a switchman standing at such junction switch, or the station switch so first approached with a white flag by day, or a light at night, to indicate that such switches are in a proper position for the passage of such train; or unless, in the absence of such switchman, said train shall first be brought to a full stop, at the distance of not less than two hundred feet nor more than seven hundred feet therefrom; and every person who shall run a train over any such switch, contrary to the provisions of this section, shall be fined not more than one hundred dollars, or imprisoned not more than sixty days, or both; and the president and directors of any railroad company, who shall permit such train to be run over any such switch, contrary to the provisions of this section, shall be fined five hundred dollars; but the Railroad Commissioners may dispense with any such switchmen.

SEC. 3565. The Commissioners may permit passenger trains to be run past any switch, station, or highway crossing without stopping, at such rate of speed as they may prescribe, upon the provision by said company of such safeguards for the protection of its passengers and the public as said commissioners may require; and for neglecting to make such provision, such company shall pay a fine of five hundred dollars.

1885, ch. 81.

Duty of Commissioners on complaint of interference with navigation by use of draw-bridge.

G. S. 1875, 331, § 77.

Passenger trains to stop at nearest regular station to a drawbridge.

G. S. 1875, 331, § 78.

Switches at railroad junctions.

G. S. 1875, 332, § 79.

When trains may pass switch, etc., without stopping.

G. S. 1875, 332,
§ 80.
Number of
brakemen on
train.

SEC. 3566. Upon every train run, or intended to be run, upon any railroad in this State, at a greater average speed than thirty miles an hour, between stations, and consisting of more than two passenger cars, one brakeman shall be kept at the brake of each car; but when the double-action brake is used on any such train but one brakeman need be kept upon and for every two cars connected with such train; and the Railroad Commissioners may grant permission to any railroad company to reduce the number of brakemen required upon passenger trains, when such company may have adopted a system of brakes to be operated by the engineer, which in the opinion of said Commissioners may render such number of brakemen unnecessary; but said Commissioners may revoke such permission when they consider the public safety requires; and on such revocation such company shall place upon its train the number of brakemen required by law.

G. S. 1875, 332,
§ 81.
1881, ch. 10.
Companies to
give notice to
Commissioners
of accidents.

SEC. 3567. Every railroad company shall, within twenty four hours after the occurrence of any accident attended with personal injury, give notice of the same to the Railroad Commissioners, in writing, who, upon receiving such notice, or upon public rumor of such accident, may repair, or dispatch one of their number to the scene of said accident, and inquire into the facts and circumstances thereof; and the Commissioners shall, without charge, furnish any person injured, or the friends of any person killed, any information they may have acquired in relation to any disaster, and the names of the persons from whom the same was obtained, or by whom the same may be proved.

1883, ch. 117.
Railroad trains
to be provided
with hospital
stretcher.

SEC. 3568. Every railroad company shall provide and cause to be placed in some car attached to every train passing over such railroad, and at every passenger station, a suitable hospital stretcher for use in case of accidents.

1887, ch. 90.
Railroad Com-
missioners may
make orders
and report neg-
lect to General
Assembly.

SEC. 3569. The Railroad Commissioners may make any and all orders which shall seem to them to be required by public safety and prudence relative to heating and lighting passenger cars, and shall report any neglect by any railroad companies to comply with such orders to the General Assembly at its next regular session.

Chapter CCXVIII.

BONDS AND MORTGAGES.

SECTION.

3570. Loans and bonds.

3571. Mortgage of road.

3572. Mortgage, including rolling stock, etc., and foreclosure of same.

3573. Surrender of road to mortgage trustees.

3574. Limitation of liability of trustees in possession.

3575. Return and record of inventory.

SECTION.

3576. Rendition of quarterly accounts; foreclosure.

3577. Removal of trustees.

3578. Rights of prior incumbrancers saved.

3579. Trustees to have the powers of the company.

3580. Expenses and compensation of trustees.

SEC. 3570. Every railroad company may borrow money, and may secure the repayment of the same by its bonds, signed by its president, and countersigned by its treasurer; but before being issued said bonds shall be registered in the office of the Comptroller, and a certificate thereof shall appear on the face of each bond; and the Comptroller shall cancel any bonds so registered which may be brought to him for that purpose, and enter said act of canceling in his register; but no railroad company shall issue any bonds of a less denomination than one hundred dollars, nor have bonds outstanding at any one time to a greater amount than one-half the actual cost of the construction of said railroad, or than one-half the sum which its president, treasurer, and an engineer, approved by the Railroad Commissioners, shall certify under oath has been actually expended upon its railroad; and any false swearing in the matter shall be perjury, and the Comptroller shall not permit the bonds of any railroad company, registered in his office, and uncanceled, to exceed the amount limited in this section. Such company may dispose of its bonds as shall be authorized by its stockholders.

G. S. 1875, 332,
§ 82
1882, ch. 140,
§ 4.
Corporation
may borrow
money and
issue bonds.

May sell bonds.

SEC. 3571. The company may secure said bonds by a mortgage of its property, or any part thereof, by deed duly executed by its president, under the corporate seal, to the Treasurer of the State, and his successors in office, in trust for the holders of said bonds, and recorded in the office of the Secretary of the State.

G. S. 1875, 333,
§ 83.
Railroad may be
mortgaged to
secure bonds.

Every railroad company which shall guarantee the payment of the principal or interest of any bonds, or dividend on any stock issued by any other corporation, shall cause such bonds and the certificates for such stock to be registered in the office of the Comptroller, and a certificate thereof shall appear on the face of each of such bonds and certificates of stock. And the Comptroller shall cancel any bonds and certificates of stock so registered which may be brought to him for that

1889, ch. 218.
Bonds or stock
of another cor-
poration, guar-
anteed by a
railroad com-
pany to be reg-
istered.

Limitation of
guaranty.

purpose, and enter said act of canceling in his register. But no railroad company shall guarantee bonds or stock to an amount which, together with the outstanding bonds issued by said guaranteeing company, shall exceed one-half the actual cost of the construction of the railroad of said company, the amount of which actual cost its president, treasurer, and an engineer approved by the Railroad Commissioners, shall certify under oath has been actually expended upon its railroad, and any false swearing shall be perjury. And the Comptroller shall not permit the registration of the bonds of any railroad company, or of any bonds whose principal or interest is guaranteed by such railroad company, or of any stock of another company upon which any income or dividend is guaranteed by such railroad company, so long as there are outstanding and uncanceled bonds of said company and bonds or stock guaranteed by said company, the principal of which said bonds and guaranteed bonds and stock all together is equal in amount to one-half the cost of the company's railroad to be certified in the manner hereinbefore set forth. And no railroad company shall issue its own bonds or guarantee the principal or interest of bonds or a dividend upon stock of any other company so long as there are outstanding and uncanceled its own bonds or the bonds or stock of another company, guaranteed, as aforesaid, to a principal amount equal to one-half the cost of said railroad company, as verified in the manner above set forth.

1877, ch. 38.
Mortgages of
railroad prop-
erty and fore-
closure of same.

SEC. 3572. When any railroad company has mortgaged, or shall mortgage, its railroad, pursuant to law, to secure its bonds, and has included or shall include in said mortgages all or any part of its rolling stock, locomotives, and cars, whether those owned by it at the date of said mortgage, or those thereafter to be acquired by it for use upon said railroad, or both, such mortgage shall be deemed valid and effectual, as respects all the property therein included as aforesaid, and may be foreclosed in the same manner as ordinary mortgages of real estate; and the record thereof in the office of the Secretary of the State shall be a sufficient record and notice to protect the title under the mortgage, notwithstanding such company may remain in possession of all or any part of the mortgaged property.

G. S. 1875, 333,
§ 84.
Surrender of
road to mort-
gage trustees.

SEC. 3573. When any railroad company shall have mortgaged its property or any part thereof, to any person, in trust, for the security of its creditors, or for the security of any class of them, and shall have made

default in the payment of principal or interest, due to such creditors, any such creditor may bring his complaint to the Superior Court, in any county in which such railroad or any part thereof is located, setting forth such fact and claiming that such trustee may be placed in the possession of such property, for the benefit of such creditors; and such complaint shall be heard and determined at the first session of the court to which it is returnable, unless continued for reasonable cause; and if the allegations therein are found true, such court shall decree that the said company and its president and directors, under a suitable penalty, shall surrender such mortgaged property to the trustee, for the benefit of such creditors.

SEC. 3574. When any such trustees shall have taken possession of any property in pursuance of the provisions of the preceding section, or in pursuance of any authority contained in the mortgage or deed of trust, he shall take charge of and operate such railroad, or railroad property, for the benefit of the creditors for whom such trust was created, and shall not be personally liable for any cause or injury arising from the operation of such road, or while he may operate it, except for his willful mismanagement, or for any contracts made by him as such trustee; but all such property shall be liable for the acts and proceedings of such trustee, in the execution of his trust, to the extent of the interest of the creditors, for whose benefit he may act; and any proceeding for the purpose of making such property liable, shall be brought against such trustee, describing him as such.

G. S. 1875, 333,
§ 85.
Limitation of
liability of
trustees in pos-
session.

Trust estate
liable for acts of
trustee.

SEC. 3575. The trustee upon taking possession of such property, shall make an inventory of all which may come into his possession under oath, and lodge it for record in the office of the Secretary of the State; and if any other property shall, from time to time, be discovered by him, he shall make and lodge a like inventory, under oath, as aforesaid.

G. S. 1875, 333,
§ 86.
Trustee to make
and return in-
ventory.
26 Conn., 121.

SEC. 3576. The trustee shall, from time to time, while operating such road, file his account, quarterly, in the office of the Secretary of the State, of all moneys received or disbursed by him, in the course of his agency; and may proceed at his discretion, in the Superior Court, in any county in which such railroad, or any part thereof, is located, to foreclose said railroad company, and all subsequent incumbrancers, for the use of the bondholders, or other creditors for whom he acts; and such court may limit the time for the redemp-

G. S. 1875, 333,
§ 87.
Trustee to ren-
der quarterly
accounts to
Secretary.

May foreclose
for the bond-
holders.

tion of the mortgaged property, as in ordinary proceedings for the foreclosure of real property.

G. S. 1875, 334,
§ 88.
Superior Court
may remove
trustee for
cause and ap-
point another.

SEC. 3577. If such trustee shall neglect or unnecessarily delay to perform his duties, any creditor, represented by such trustee, may apply to the Superior Court in any county in which such railroad or any part thereof is located, for the removal of such trustee, which application shall be heard at the first session of said court; and upon such facts being found true, such court may remove the trustee from his office, and appoint another in his stead.

G. S. 1875, 334,
§ 89.
Rights of prior
incumbrancers
not to be
affected.

SEC. 3578. Nothing in the five preceding sections shall affect any mortgage, trust, or lien upon the property foreclosed, which was created prior to the mortgage, trust, or lien, under which such trustee may act; but the trustees for all such prior incumbrancers may proceed, by foreclosure or otherwise, notwithstanding any act or proceedings by subsequent incumbrancers or their trustees.

G. S. 1875, 334,
§ 90.
Trustees to
have the same
powers, etc., as
the corporation.

SEC. 3579. When any such railroad is in the possession of an assignee or trustee, he shall have the same rights, powers, and privileges as are conferred upon railroad companies; and all expenses and damages incurred by such persons so in possession, in good faith to improve the lines of the railroads so in their charge, shall be reimbursed to them from the earnings of such railroad while they have the possession thereof.

G. S. 1875, 334,
§ 91.
Expenses of
road, damages,
compensation
of trustee, etc.,
to be deducted
from earnings.

SEC. 3580. The expenses of operating such railroad, or other property, including repairs and all other reasonable expenses of the trustee, and any damages incurred for any injury sustained during the time of his execution of said trust, and all claims secured by any prior mortgages or incumbrances, which shall have become payable before or during said time, and also a reasonable compensation to be allowed to the trustee by the Superior Court, shall be deducted from the earnings of the road, before any part of such earnings shall be paid to the creditors.

MISCELLANEOUS PROVISIONS.

1889, ch. 198.
Comptroller to
furnish trans-
portation
tickets to mem-
bers of General
Assembly.

SECTION 1. The Comptroller, whenever requested by any member or member-elect of the General Assembly so to do, shall procure from such railroad company or companies as may be necessary a ticket or tickets entitling said member to transportation by the most convenient route between Hartford and his home station, during the session of the General Assembly next to

be holden, or then current, which ticket or tickets the Comptroller shall deliver to the said member upon receiving from him an assignment to the State of his mileage allowance for the session in question, which assignment shall be received in full payment therefor.

SEC. 2. The Comptroller is hereby authorized and directed to pay for the tickets, so procured by him, such sum or sums as may reasonably be charged therefor by the railroad companies. Payment therefor.

SEC. 3. No railroad company shall issue to any member or member-elect of the General Assembly any ticket or other token entitling him to transportation to and from Hartford, during any session of the General Assembly, except as provided in section one of this act, unless such ticket be issued upon the same terms and at the same price as tickets are ordinarily issued by said company entitling the holder to an equivalent amount of travel. Railroad company not to issue tickets to members, except.

Chapter CCXIX.

SECTION.

3581. Responsibility for fire communicated by engine; insurable interest in land exposed.

3582. Notice of claim for damages by fire.

SECTION.

3583. Appraisal of damages for land condemned shall not include risk of fire.

3584. Water-closets at stations.

3585. Duties of railroad companies, on whom obligatory.

SEC. 3581. When any injury is done to a building or other property of any person, by fire communicated by a locomotive engine of any railroad company, without contributory negligence on the part of the person entitled to the care and possession of the property injured, the said railroad company shall be held responsible in damages to the extent of such injury to the person so injured; and every railroad company shall have an insurable interest in the property for which it may be so held responsible in damages along its route, and may procure insurance thereon in its own behalf. 1881, ch. 92. Responsibility for fire communicated by engine. 52 Conn., 264. 54 Conn., 447.

SEC. 3582. No action shall be brought under the preceding section unless written notice of the claim is given to the defendant company within twenty days after the fire, specifying the day and hour of the fire, the property injured, and the amount claimed as damages. Such notice may be given by a letter signed by the claimant or his agent, mailed to the superintendent of the railroad, or delivered to its station agent at a station in the town where the fire occurred. Company has insurable interests in property exposed to such fire. 1881, ch. 92. Notice of claim for damages by fire.

SEC. 3583. No appraisal of damages for land taken or injured by the location or construction of a railroad, 1881, ch. 92. Appraisal of damages for

land condemned shall not include risk of fire.

shall include any compensation for the increased risk of fire to any buildings erected on or to be erected on land outside of such location, on account of sparks from locomotive engines on such railroad.

1882, ch. 47.
Water-closets at stations.

SEC. 3584. Every railroad company operating steam railroads in this State shall maintain at each regular passenger depot on the railroad operated by them respectively such suitable water-closets as in the judgment of the Railroad Commissioners the public convenience may require; and said Commissioners may make all necessary orders in the premises, and enforce the same by *mandamus*, in the name of the State.

1884, ch. 110.
Duties of "railroad companies," on whom obligatory.

SEC. 3585. All duties and obligations imposed by law upon railroad companies, in reference to returns to be made to the Comptroller or Railroad Commissioners, are hereby made obligatory and binding upon such corporations, and upon trustees, receivers, or other persons that lay out, construct, maintain, or operate a railroad operated by steam power.

Chapter CCXX.

RETURNS.

SECTION.

1. Forms for returns.
2. When to be made; to be signed and sworn to.
3. Penalty for neglect.

SECTION.

3589. Commissioners may require amendment of defective returns, under penalty.
3590. To be made by lessors.

1889, ch. 172.
R. R. Commissioners to furnish blanks for railroad returns.

SECTION 1. The Railroad Commissioners shall, on or before the thirtieth day of June, annually, furnish to every railroad company, and to the trustees operating any railroad, duplicate blanks for returns in the form required by the Inter-State Commerce Commission, which returns shall be for the year ending on said thirtieth day of June.

Companies to make their returns accordingly.

SEC. 2. All companies or trustees receiving such blank forms shall return one of them to the Commissioners on or before the fifteenth day of September in each year, with all questions fully answered, except where the answers would be "none" or "nothing," in which case the question itself may be stricken out. Said returns shall be signed and sworn to by the president or vice president and treasurer of the company, or by a majority of the trustees making the same.

Penalty for refusal or neglect.

Sec. 3. Every company, whose president or vice-president and treasurer or trustees shall refuse or neglect to make such returns, shall forfeit to the State

twenty-five dollars for each day of such neglect or refusal, and such Commissioners shall report such forfeiture to the State Treasurer, and the books of every railroad company shall at all times be open to the inspection of any committee of the General Assembly appointed for that purpose.

SEC. 4. Sections 3586, 3587, and 3588 of the general statutes are hereby repealed.

SEC. 3589. Every railroad company shall make its annual returns strictly according to the forms provided, and if the officers or trustees find it impracticable to return all the items in detail as required, they shall, in their report, give the reasons why they cannot be given; but no company shall be excused for not giving such details because it does not keep its accounts in such manner as will enable it to do so. And when any such returns seem to said Commissioners defective or erroneous, they shall notify the company or trustees making the same, and require the amendments of such returns within fifteen days, under the same penalty as is provided for refusing or neglecting to make returns.

Every person who shall willfully make false report to the Insurance Commissioner or the Railroad Commissioners, or who shall testify or affirm falsely to any material fact in any matter wherein an oath or affirmation is required or authorized, or who shall make any false entry or memorandum upon any book, paper, report, or statement of any insurance or railroad company, with intent in either case to deceive the Insurance Commissioner or the Railroad Commissioners, or any agent appointed to examine the affairs of any such company, or to deceive the stockholders or policy-holders or any officer of any such insurance or railroad company, or to injure or defraud any such company, and any person who, with like intent, aids or abets another in any violation of this act, shall be imprisoned in the State prison not less than one nor more than five years.

SEC. 3590. The officers, trustees, or receivers of every railroad company which has leased a railroad upon terms by which the rental is based upon the earnings of the leased road shall make returns to the Railroad Commissioners of the leased road, separate and apart from the business of the lessee, and in the same manner that the officers of said leased railroad would be required to make returns had it not been leased.

1878, ch. 60.
Returns to conform strictly to the forms.

Commissioners may require amendment of defective returns, under penalty.

1889, ch. 121.
Making false report to insurance or railroad commissioners, how punished.

1884, ch. 110.
Returns to be made by lessors of railroad.

CONNECTICUT CENTRAL RAILROAD.

SECTION.

3591. Connecting roads to furnish and be furnished with accommodations, etc.

3592. When companies disagree as to such accommodations.

SECTION.

3593. Preceding sections confined to Connecticut Central and Rockville railroads and their connections.

1878, ch. 89.
Connections of
Connecticut
Central Rail-
road.

Connecting
roads to furnish
mutual accom-
modations, etc.

1878, ch. 89.
When compa-
nies disagree
as to such ac-
commodations,
etc., Railroad
Commissioners
may determine
the matter.

SEC. 3591. When the railroad of the Connecticut Central Railroad Company, or any of its branches, meets or lawfully crosses another railroad at the same level therewith, the company by which either of said railroads is owned or operated may, with the written consent of the Railroad Commissioners, and upon such terms as said Commissioners shall, after due hearing, prescribe, enter its road upon or unite the same with and use the road for the other; but no locomotive engine or other motive power shall be allowed to run upon a railroad except such as is owned or controlled by the company owning or operating such railroads or with the consent of such company; and every such company shall, at all reasonable times, and for a reasonable compensation, draw over its railroad the passengers, merchandise, and cars of the other, and each of them shall for a reasonable compensation provide upon its railroad convenient and suitable depot accommodations for the passengers and merchandise of the other road passing to and over it, and shall receive and deliver the same in the manner it receives and delivers its own passengers and freight.

SEC. 3592. If the companies cannot agree upon the stated periods at which the cars of one shall be drawn over the other, and the compensation to be paid therefor, or cannot agree upon the terms and conditions upon which the accommodation shall be furnished for the passengers and merchandise of the other, the Railroad Commissioners, upon the petition of either party and notice to the other, shall hear the parties and shall in each case determine (having reference to the convenience and interests of the companies and of the public to be accommodated thereby) the stated periods for drawing cars and the compensation therefor, or the terms and conditions for passengers and merchandise, or the requisite terminal accommodations as aforesaid; and said Commissioners, upon the application of either party, shall determine all questions between the parties in relation to the transportation of freight and passengers, and other business upon and connected with said

railroads in which they are jointly interested, and the manner in which the business shall be done, and apportion to each company its respective share of the expenses, receipts, and income of the same. And the award of the commissioners, or a major part of them, shall be binding upon the respective companies interested therein for one year, or until the Commissioners shall revise and alter the same; *provided*, however, that any railroad company aggrieved by any order of the Railroad Commissioners, made under the provisions of this chapter, may appeal from the same to the Superior Court of the county wherein said railroads meet, within twenty days of the date of such order, in the same manner that appeals are allowed upon any proceeding relative to the location, abandonment, or changing of depots or stations.

Appeal from
Commissioners.

SEC. 3593. The provisions of the two preceding sections shall apply to the Connecticut Central and such other railroads whose tracks are now intersected or crossed by the track or tracks of said Connecticut Central Railroad; and also to the Rockville Railroad and to such other railroads as connect therewith or are intersected thereby, and to the several railroad companies owning or operating said respective railroads; but none of said provisions shall apply to any other railroad.

1873, ch. 89.
1873, ch. 90.
Preceding sections confined to the Connecticut Central and Rockville Railroads and their connections.

Title LXVII, Chap. 224.

GENERAL PENALTY.

SEC. 3607. Every person who shall violate any provision of this title, for which no other penalty is prescribed or provision made, shall be fined not less than ten nor more than five hundred dollars.

G. S. 1875, 340.
§ 1.
Penalty.

Title LXVIII, Chap. 231.

SEC. 3696. The member of the Board of Railroad Commissioners who is a civil engineer, and one civil engineer residing in each congressional district in this State, to be appointed by him, shall constitute a board of civil engineers, and have the supervision of all dams and reservoirs now existing or hereafter constructed in any locality where, by the breaking away of the same, life or property may be in danger of destruction.

1873, ch. 131.
§ 1.
Board of civil engineers or supervisors, how constituted.

SALARY AND FEES.

SEC. 3706. . . . the Railroad Commissioners, each, three thousand dollars.

G. S. 1875, 173,
ch. 2.
Railroad Com-

missioners.
1885, ch. 119.
Chief clerks.

1889, ch. 8.
State salaries
when payable.

The chief clerks of the Railroad Commissioners, each eighteen hundred dollars.

SEC. 1. The salaries of the members of the General Assembly shall be paid at the close of its regular session: and all annual and per diem salaries shall be paid on the first day of the month succeeding that in which the services were rendered; *provided*, that when said first day shall fall on Sunday or a holiday, such salaries shall be paid on the succeeding day.

TAXATION.

G. S. 1875, 154,
§ 12.
Property ex-
empt from
taxation.
Certain railroad
bonds.

SEC. 3820. The following property shall be exempt from taxation: . . . bonds in the hands of the holders thereof, issued by any town or city in aid of the construction of the railroads of the Connecticut Western Railroad Company, the New Haven, Middletown & Wilimantic Railroad Company, the Shepaug Valley Railroad Company, the Connecticut Valley Railroad Company, the Connecticut Central Railroad Company, or either of them, to provide or raise money to pay for stock subscribed for by it in any of said companies; but such bonds or stock, when their avails shall have been expended in the construction of any of said railroads, shall be assessed and taxed in the manner provided in section 3920.

1889, ch. 227.
New issue of
municipal
bonds when ex-
empt from taxa-
tion.

SEC. 1. When any town or city in this State has issued or shall issue new bonds under or by virtue of any statute, public or private, for the purpose of redeeming or providing a fund to redeem its bonds originally issued in aid of the construction of any railroad, and which by the statutes of this State were exempt from taxation, or for redeeming or providing a fund to redeem any re-issue of the same, such new bonds, and the amount invested therein, shall be exempt from taxation in the hands of the holders thereof in the same manner and to the same extent as the original bonds, and the amount invested therein, and no direct, indirect, or franchise tax shall be assessed thereon.

G. S. 1875, 115,
§ 16.
Property taxed
out of this
State, exempt.

SEC. 3830. The list of any person need not include any property situated in another State, when it can be made satisfactorily to appear to the assessors that the same is fully assessed and taxed in such State, to the same extent as other like property, owned by its citizens; but the provisions of this section shall not apply to moneys loaned by residents of this State to any party

out of this State, as money at interest; nor to bonds issued by, or loans made to, any railroad company, located out of this State, when such bonds are owned, and loans made, by residents of this State.

SEC. 3835. Every dwelling-house belonging to any railroad company shall be set in the list, and be liable to taxation, in the town where said dwelling-house is situated, notwithstanding the fact that the same may be rented to, or occupied by an employe of said railroad company, and the amount paid for taxes on any such dwelling-house or houses shall be deducted from the sum required by law to be paid by such railroad company for taxes to the State.

1887, ch. 54.
Taxation of
dwelling-
houses belong-
ing to railroad
companies.

SEC. 3919. The secretary or treasurer of every railroad company, any portion of whose road is in this State, or if such portion of said road is in the hands of a trustee or receiver, then such trustee or receiver shall, on or before the fifteenth day of November, annually, deliver to the Comptroller a sworn statement of the condition and affairs of said company or road as they existed on the thirtieth day of the preceding September, in the following particulars, namely, the number of shares of its stock, and if the same consists of different classes, then of those of each class, and the market value of each share; the dividends paid per share on each class of said stock during the year preceding said thirtieth day of September, and the dates of said payments; the amount of its funded and floating debt, and the market value of any of such indebtedness which is below par in value; the number, amount, and market value of any unpaid bonds secured by mortgage on the property of said company by any of its predecessors in title and legally convertible into the capital stock of such company; the amount of bonds issued by any town or city of the description mentioned in section 3820, when the avails of such bonds, or stock subscribed and paid for therewith, shall have been expended in such construction; the amount of money actually on hand in cash in the treasury or in the possession of the proper officers or agents of the company or of any such trustee or receiver; the amount paid for taxes in this State during the year ending on said thirtieth day of September upon any real estate owned by said company, trustee, or receiver, and not used for railroad purposes; the whole length of the road, and the length of those portions thereof lying without this State.

G. S. 1875, 168,
§ 5.
1876, ch. 81.
1882, ch. 69, 139.
1887, ch. 117, § 1.
Returns by
railroad
companies.
48 Conn., 44.

SEC. 3920. Every such railroad company, trustee, or receiver shall, on or before the twenty-fifth day of

G. S. 1875, 168,
§ 6.
1876, ch. 9.

1882, ch. 69.
1887, ch. 117, §2.
Amount of
tax to be paid
by railroad
companies.
36 Conn., 255.
40 Conn., 496.

November, annually, pay to the State one per cent. of the valuation, made and corrected by the Board of Equalization, of said stock, and one per cent. of the par value of such funded and floating indebtedness, as required to be contained in said statement, or, if any of said indebtedness is worth less than par, then one per cent. of its valuation made and corrected by said board, after deducting from such valuations the amount of any bonds or other obligations of said company, or of their market value, if below par, which may be held in trust for said company as a part of any sinking fund belonging to it, and also deducting from said sum required to be paid, the amount paid for taxes in this State during the year upon any real estate owned by said company, trustee, or receiver, and not used for railroad purposes; and the valuation so made and corrected by said board shall be the measure of value of such railroad, its rights, franchises, and property in this State for purposes of taxation; and this sum shall be in lieu of all other taxes on its franchises, funded and floating debt, and railroad property in this State.

G. S. 1875, 168,
§ 7.
1882, ch. 69.
When only part
of the railroad
lies in this
State.

SEC. 3921. When only part of a railroad lies in this State, the company owning such road shall pay one per cent. on such proportion of the above named valuation as the length of its road lying in this State bears to the entire length of said road. But in fixing the aforesaid valuation and lengths, neither the value nor length of any branch thereof in this State, which the Board of Equalization shall determine to be of less value per mile than one-fourth of the average value per mile of the trunk road, shall be included; but every such branch shall be estimated at its true and just value by the Board of Equalization, and such railroad company shall pay to the Treasurer of this State one per cent. on such value at the time fixed in the preceding section for the payment of other railroad taxes, and when any such sum becomes due, and such company shall not then have the management and control of its road, or the road bearing its name, the person or corporation then owning or managing such railroad shall pay such sum to the State within the time above prescribed.

G. S. 1875, 169,
§ 8.
Lessee of
railroad may
deduct taxes
from rent.

SEC. 3922. The taxes paid by the lessee of any railroad, under any contract or lease, existing on the tenth day of July, 1862, may be deducted from any payments due or to become due to the lessor, on account of such contract or lease.

1881, ch. 153.
Where railroad
company leases

SEC. 3923. Every railroad company in this State, which holds by lease or otherwise a railroad in another

State, which is not a part of its own road, shall state in a railroad in its annual return for the purposes of taxation how much of its funded and floating debt was occasioned by, and how much of its capital stock was issued for any amount which has been expended by it in the construction or permanent improvement of such railroad in another State, or in the purchase of equipment for exclusive use thereon; and in computing the amount of tax to be paid by said company to this State, the amount of such funded or floating debt and of such stock so occasioned or issued as aforesaid shall be first deducted from the total amount of its funded and floating debt and stock.

SEC. 3924. The mortgagees or trustees of any railroad lying in whole or in part in this State, who have, or shall hereafter come into possession of the same by virtue of any mortgage thereof, shall, within the first ten days of October, annually, so long as they remain in possession of said railroad, deliver to the Comptroller a sworn statement of the value of said road, its equipment and other property, located in this State, and in their hands, as such mortgagees or trustees. 1875, ch. 61. Trustees in possession of mortgaged railroad to make annual returns.

SEC. 3925. Said mortgagees or trustees shall, on or before the twentieth day of October in each year, or as soon thereafter as the earnings of said road or other moneys in their hands will allow, pay to the State a sum equal to one per cent. on the value of said road, equipment and other property, less the amount of taxes paid by them on any real estate in their hands not used for railroad purposes. 1875, ch. 61. Tax on railroad mortgagees or trustees.

SEC. 3926. In all cases in which the road and estate of any railroad company shall have been, or shall hereafter be, foreclosed under any mortgage executed by it for the security of its creditors, and any other railroad company shall have or shall hereafter become, by purchase or otherwise, the owner of said road and estate so foreclosed, said company shall make the returns and payments required by this chapter, and any funded or floating indebtedness to which such railroad and estate is liable shall be considered, for the purpose of this enactment, as the indebtedness of said company, whether the same may have been contracted by it, or by some predecessor in its title. 1875, ch. 61. Returns and payments when other railroad company purchases.

SEC. 3927. Any and all taxes which shall become due to the State from any railroad company, or from the mortgagees or trustees of any railroad, under the provisions of this chapter, shall be and remain a lien on the road and property on account of which said tax is imposed, 1875, ch. 61, 83. Taxes to be liens.

until the same shall be paid, and shall take precedence of any and all other incumbrances and liens whatever.

1887, ch. 117.
Market value of
stocks, how
determined in
certain cases.

SEC. 3931. In case of any railroad company, which, during the two years ending on the thirtieth day of September next preceding the time for making such annual returns, has paid regular dividends at the same annual rate per cent. on all or any class of its shares of stock, the market value of each share of such stock or class stock, as the case may be, for the purposes of the returns so to be made as aforesaid, shall be and the same is hereby declared to be the average of the closing bids or prices offered for said stock or any shares thereof during the month of September preceding the time for making such returns, as regularly published by any board of brokers, such board being named in said returns; and every party whose duty it is to make such returns shall adopt, in making the same, such average price as the invariable standard of said market value, and the Board of Equalization in examining and correcting said returns and in making out the statements required to be made, as the case may be, shall conform to and adopt such valuation, unless they shall be of the opinion that the interests of the State require that the market value of said stock shall be otherwise ascertained, in which case they may find, upon the best information which they can obtain, and fix a different valuation. As to all other shares of stock in any railroad company, the market value thereof shall be ascertained and returned, as far as possible, in the same manner as is hereinbefore provided for the shares of stock upon which regular dividends have been paid as aforesaid, but in such returns any facts may be stated showing that such market value differs from the true value, and the Board of Equalization, in examining and correcting said returns and in making out the statements required to be made, shall regard said market value, if it can be so ascertained, as the proper standard of the value of such shares, unless from the facts stated, or from other information, they shall think it proper to adopt a different valuation, which they in such cases may do. In all cases where for any reason it is not possible or feasible to fix or ascertain the market value for any stock in the manner aforesaid, it shall be returned by the party whose duty it is to make such return, at the price of the last reported market sale of said stock, and in such cases the Board of Equalization may, in correcting said returns, and making out any statements so required to be made, fix and determine, according to the best information which

When determined must be adopted and conformed to except when.

In all other cases market value, how determined.

Where market value cannot be fixed, how returned.

Valuation, how determined.

they can obtain, any valuation for said stock which they may think proper.

SEC. 1379. No suit for any forfeiture, upon any ^{Forfeitures.} penal statute, shall be brought, but within one year next after the commission of the offense.

AN ACT CONCERNING STREET RAILWAYS.

[1893, Chapter 169.]

SECTION 1. Sections 3595, 3596, 3597, and 3605 of ^{Repeal.} the general statutes are hereby repealed.

SEC. 2. Whenever any railway company shall have ^{Incorporated street railway company before proceeding to construct, to lay additional tracks or to change motive power, shall cause plan to be presented.} been chartered by the general assembly of this state for the purpose of operating street railways in any town, city, or borough, or whenever any such corporation already organized has been, or shall be given, the right to lay additional tracks in any such town, city, or borough, or whenever any street railway company shall desire to change its motive power, before such company shall proceed to construct such railway, lay additional tracks, or change its motive power, it shall cause a plan to be made showing the highway or highways, street or streets, in and through which it proposes to lay its tracks, the location of the same as to grade and to the center line of said streets or highways, such change or changes, if any, as are proposed to be made in any street or highway, the kind and quality of track to be used and the method of laying the same, the motive power to be used in propelling its cars, and the method and manner of applying the same, which said plan shall be presented to the mayor and court of common council of any such city, the selectmen of any such town, or the warden and burgesses of any such borough, within their respective jurisdictions, who shall thereupon, upon public notice, proceed to a hearing of all persons interested therein, and after such hearings, may accept and adopt such plan, or make such modifications therein, as to them shall seem proper, and shall, within sixty days after the presentation of such plan to the local authorities, notify said company in writing of their decision thereon, and of such modifications therein as they may deem proper. ^{Hearing on plan.} The refusal or neglect of any such local authority to notify said company of its decision within said period of sixty days as aforesaid shall be deemed to be a refusal to approve and accept said plan as presented by said company. ^{Notification of decision.} Nothing in this act shall be construed so as to prevent such street railway

company from presenting to such local authorities a plan or plans as heretofore provided, until said street railway company and local authorities shall agree upon the same, and no such company shall construct such railway, lay additional tracks, or change its motive power except in accordance with a plan approved by the authorities aforesaid.

Who has direction over locating tracks, etc.

SEC. 3. The selectmen of any town, the mayor and common council of any city, and the warden and burgesses of any borough, shall within their respective jurisdictions, have exclusive direction over the placing or locating of any tracks, wires, conductors, fixtures, structures of any such railway permanently located in the streets or highways, including the relocating or removal of the same, or changes in the grade thereof, and for the purposes of any public improvement and including the power of designating the material, quality, and finish thereof, may make all orders necessary to the exercise of such power of direction and control, which orders shall be in writing, and recorded in the minutes and records of their respective municipalities. Every such railway company shall, at its own expense, comply with and carry out such orders forthwith, and, in case of its failure so to do, such town, city, or borough may carry out said orders and recover the expense thereof from such company in an action on this statute; or may proceed by a writ of mandamus to compel such railway company, at its own expense, to comply with and carry out such orders; *provided, however*, that except in the case of bridges, terminals, curves in turning from one street to another, and turnouts and switches not exceeding one hundred and fifty feet in length, the wrought part of any street or highway made suitable for travel shall nowhere be of a width less than eight feet on each side of the street railway tracks, measuring from the outer rails where the said tracks are located in the center of the street or highway, and not less than twelve feet in width, measuring from the rail nearest the wrought part of the highway, where said street railway track or tracks are located on the side of the street or highway, unless permission is obtained from the superior court or a judge thereof; *and provided further*, that nothing herein contained shall be construed as requiring any such railway company to change the grade of any portion of the street or highway upon which its track is located, after such location; but whenever any such town, city, or borough shall change the grade of any such street or highway, such railway company shall temporarily remove its tracks for the purpose of such change, and when such change has

been completed, such company shall conform the grade of its tracks to the newly established grade without cost or expense to such town, city, or borough.

SEC. 4. In case any street railway company char- Rights of cer-
tered prior to the first day of January, 1893, shall not tain companies
construct and complete its road in any of the streets or to lay tracks to
highways, in which it shall thereby be authorized to cease, when.
construct its railway, on or before the close of the regular session of the general assembly to be held in 1895; and in case any street railway company which shall be chartered after the first day of January, 1893, or whose charter shall be thereafter amended, shall not construct and complete its road in any of the streets or highways in which it shall be thereby authorized to construct a railway on or before the close of the second regular session of the general assembly, after that in which said charter has been granted or amended, all right of said company to lay its tracks in all such streets or highways or portions of streets or highways specified in such charter or in such amendment, in which it shall not have laid down its tracks, shall thereupon cease; *provided, however*, that the right in any street, or highway, or portion of street, or highway of any street railway company under any charter or amendment thereto granted prior to the first day of January, 1893, which company shall have heretofore constructed a part of its railway, shall not cease if said company shall construct its railway within two years after the municipal authorities in the town, city, or borough in which said street or highway is located shall have notified such company to construct its railway in said street or highway.

SEC. 5. If any street railway company shall discon- Effect of dis-
tinue the operation of its railway in any street or high- continuance of
way, or portion of a street or highway, or, having con- operation of
structed its railway thereon, shall not begin to operate railway.
the same within a reasonable time thereafter, the mayor and court of common council of any city, the selectmen of any town, or the warden and burgesses of any borough, within whose respective jurisdictions such discontinuance or failure to operate said railway may occur, may order said company, in writing, to operate said part or parts of its railway within thirty days from a date named in such notice, and on failure to comply with said order, all right of said company to occupy such street or highway or portion of such street or highway, or to keep, maintain, or operate its said railway within such street or highway, or portion thereof, shall cease; and said company shall immediately there-

after remove its tracks and fixtures from such street or highway, and put such street or highway, or portion thereof, in good condition for public travel. In case said company shall fail to remove said track and fixtures, or portion thereof, and to put such street or highway, or portion thereof, in good condition for public travel, said town, city, or borough may cause such track and fixtures to be removed, and such streets or highways to be put in good condition for public travel, and may recover the expense thereof from said company in an action on this statute.

Duty of company as to repair of streets.

SEC. 6. It shall be the duty of every street railway company to keep so much of the street or highway as is included within its tracks, and a space of two feet on the outer side of the outer rails thereof in repair, to the satisfaction of the authorities of the city, town, or borough which is bound by law to maintain such street or highway. But such authority shall not order said street railway company to use any better or more expensive kind of pavement or material for that part of the street or highway which it is the duty of such railway company to keep in repair, than is used by the town, city, or borough upon the remaining width of the street or highway, except for a space of one foot on each side of each rail, unless such better or more expensive kind of pavement or material was required in the order permitting the original location and layout of such railway on such street or highway. Every such municipal authority shall keep a record of all orders as to such repairs, shall serve a copy thereof upon the railway company, and such order shall state the time within which repairs are to be completed, which time shall not be less than thirty days from the service thereof; and upon failure upon the part of the company to make the required repairs within the time fixed by the order, such repairs may be made by the municipal authorities interested, and the expense thereof recovered from the railway company in an action upon this statute.

Transportation of merchandise.

SEC. 7. Every street railway company may transport both persons and property, but in the transportation of any merchandise other than such small packages or bundles as are carried by its passengers, shall be subject at all times to such regulations as may be prescribed from time to time by the superior court or by any judge thereof, upon the application of such street railway company, or of any person interested in any manner in such transportation, or by any town, city, or borough in which such street railway is located, upon such notice

as said court or said judge shall deem reasonable; and any orders made by any such court or judge may extend to and control such traffic over the whole line of such street railway company, whether the same be in one county or in more, or such order may be confined to any part of such railway in the discretion of such court or judge, and any order so made may, upon a subsequent application by such company, or any person interested, or by any town, city, or borough, be modified or rescinded by such superior court, or by any judge thereof, upon such notice as such court or judge may direct.

SEC. 8. No street railway shall hereafter be built or extended from one town to any other town in the public highways, so as to parallel any other street railway or steam railroad, unless authorized by special charter prior to January 1, 1893, until the company desiring to build, construct, or extend such railway shall have applied to the superior court or any judge thereof, and shall have obtained from such court or such judge, in the manner hereinafter required and provided, a finding that public convenience and necessity require the construction of such street railway. Any street railway company intending to build, construct, or extend any such railway shall make an application to such superior court or such judge for a finding that public convenience and necessity require the construction of such railway; and such superior court or such judge shall thereupon fix a time and place to hear said application, and shall cause notice to be served upon any steam railroad company or companies, and upon any street railway company or companies that may be affected by the construction of such road, and upon the selectmen of any town, the warden and burgesses of any borough, or the mayor of any city, within whose limits such railway may be built. Said superior court or such judge shall have power to hear the parties and determine whether public convenience and necessity require the construction of such street railway, and the decision of said court or judge shall be final and conclusive upon the parties. Such court or judge upon such hearing may make an order or finding of public convenience and necessity for the construction of such street railway for a part of the distance applied for, if said court or judge shall find public convenience and necessity require the construction of a part only of such street railway.

SEC. 9. Any person injured in person or property by reason of any defect in that part of the street or Street railway not to parallel other railroad unless. Damage caused by defect in street which

company should
keep in repair.

highway which any street railway company is bound by law to keep in repair, may bring his action therefor against both such company and the town, city, or borough which is bound by law to keep said street or highway in repair, and any judgment recovered in such action shall run against both of such defendants. Said railway company shall, however, pay such judgment and save the other defendant harmless therefrom, unless the court, or, if the case is tried to the jury the jury, before whom the action is tried, shall find that such defect was due in whole, or in part, to the negligence of such city, town, or borough, in which case the court or the jury, as the case may be, shall find and adjudge how much of the judgment shall be paid by the municipality without reimbursement from the railway company. The fact that the railway company has kept its said part of the street or highway in repair to the satisfaction of the municipal authority shall not operate to shift the responsibility for injuries occurring by reason of defects therein, from the railway company to the municipality.

Towns not
liable unless.

SEC. 10. Such town, city, or borough shall not be liable for the payment of any judgment which, under the preceding section, is to be paid by the railway company, and as to which the railway company is to save the said town, city, or borough harmless, unless within sixty days after the rendition of final judgment, demand shall be made upon such town, city, or borough for such payment upon a lawful execution, duly issued in said action. If any town, city, or borough shall be compelled to pay any portion of any judgment which, under the preceding section, should have been paid by the railway company, the first selectman of such town, the mayor of such city, or the warden of such borough, shall make, and, within thirty days after such payment, file for record in the office of the town clerk of the town within which such street or highway is situated, a certificate showing the court before which such judgment was rendered, the date of such judgment, the amount paid by such town, city, or borough, and that said town, city, or borough claims a lien upon the tracks, fixtures, and other property of such railway company situated in said town, city, or borough, for the payment of such sum with lawful interest from the date of such payment; and the same shall thereupon be and become a lien upon all the tracks, fixtures, and property of such company situate in such town, city, or borough, which shall take precedence of all other incum-

branches, and may be enforced and collected in the same manner as tax liens.

SEC. 11. The town, city, and borough authorities aforesaid, within their respective jurisdictions, may revise and change any orders made by them under sections two and three of this act; but if the street railway company affected thereby has already carried out, or begun to carry out, or incurred expense in preparation for the carrying out of such original order, such street railway company may appeal from any such alteration, revision, or change, within thirty days from the service of notice upon them of the passage of such order revising or changing such former order, to the superior court, or a judge thereof; and such appeal shall be tried by said court or judge, or by a committee of three disinterested persons appointed for that purpose by said court or judge, and such court or judge may make such orders as may be deemed equitable in the premises. But such street railway company shall not have any right of appeal from an order made under section six of this act, nor from any order made by said municipal authorities, in any case where such order is not, in terms or effect, a change of a previous order which has been executed, or partly executed, or in view of which such street railway company has incurred expense in preparing to execute.

SEC. 12. Wherever the word "street" or "highway" is used in this act, it shall include all bridges. "Street" includes bridges.

SEC. 13. The selectmen of any town, the mayor and common council of any city, or the warden and burgesses of any borough, within their respective jurisdictions, shall have power to pass suitable regulations relating to the speed at which any such street railway company may run its cars, and may alter and amend the same at pleasure, and from such alterations or orders there shall be no appeal; *provided, however*, that none of such authorities shall, by such regulations, authorize or permit such cars to be run upon any street or highway at any greater rate of speed than fifteen miles per hour. The provisions of this act relating to the operation, construction, maintenance, and repair of street railways shall apply only to such portions of said railways as are constructed over, upon, or through any street or highway. Regulations as to speed.

SEC. 14. All street railway companies or trustees operating street railways within this state, shall, on or before the first day of October, 1894, and annually thereafter, make a return to the railroad commissioners in such form as said railroad commissioners shall pre-

Alteration of orders made by authority of town, etc.

Annual report of street railway companies.

scribe, which form shall substantially follow the requirements of section 3586 of the general statutes in so far as they are applicable to the business and affairs of street railways, with such additional matters as shall render said returns as complete, as to the business, property, and affairs of street railways, as were required from steam railroads under said section 3586, which said returns shall be signed and sworn to by the president and treasurer of the company, or by a majority of the trustees making the same. And the railroad commissioners shall annually, on or before the first day of August, furnish to the officers or trustees of every street railway company blank forms which shall conform to the requirements of this section. The provisions of sections 3589 and 3590 of the general statutes shall apply to street railways. Every company, whose president and treasurer or trustees shall refuse or neglect to make such returns, shall forfeit to the state twenty-five dollars for each day of such neglect or refusal, and said commissioners shall report such forfeiture to the treasurer, and the books of every railway company shall at all times be open to the inspection of any committee of the general assembly appointed for that purpose.

Issue of bonds
by street rail-
way company.

SEC. 15. Every street railway company may borrow money, and may secure the repayment of the same by its bonds, signed by its president and by its treasurer; and, before being issued, said bonds shall be registered in the office of the comptroller, and a certificate thereof shall appear on the face of each bond; and the comptroller shall cancel any bonds so registered which may be brought to him for that purpose, and enter said act of canceling in his register; but no street railway company shall issue any bonds of a less denomination than one hundred dollars, nor for bonds outstanding at any one time to a greater amount than seventy-five per centum of the actual cost of the construction and equipment of said railway, which actual cost its president, treasurer, and a civil engineer approved by the comptroller, shall certify under oath has been actually expended in the construction and equipment of its railway, and any false swearing in the matter shall be perjury. The comptroller shall not permit the bonds of any street railway company registered in his office to exceed the amount limited in this act. No street railway company, unless specially authorized by the general assembly, shall issue bonds except in accordance with the provisions of this act. All such bonds, issued under the provisions of this section, may be secured by a mortgage

of the property of the company issuing the same by a deed duly executed by its president under corporate seal, to the treasurer of the state and his successors in office, for the holders of said bonds, and recorded in the office of the secretary of state; and such mortgage shall equally secure all such bonds as may be issued from time to time to the full amount specified in said mortgage. The provisions of Chapter CCXVIII of the general statutes, concerning the foreclosure of mortgage of railroad companies, shall apply to any mortgages or bonds issued by street railway companies.

SEC. 16. The superior court or any judge thereof shall have power, in its or his discretion, whenever public convenience and necessity require, upon application of any street railway company, to authorize such company to run its cars over the track or tracks of any other street railway company for a distance not exceeding one-half mile, where two or more railway companies are operating in the same city or town, except where the only approach to any city or town upon a particular side thereof is by means of a bridge or causeway, or by means of a bridge and causeway of a greater length than said distance of one-half mile; and in such cases the superior court or any judge thereof may authorize any suburban road approaching such city or town upon such side of said city or town to use the track or tracks of any other road crossing such bridge and causeway, from the place where such roads meet to some central point in such city or town; *provided*, the length of track so used does not exceed the length of track actually owned and operated by such suburban roads, upon such terms as to manner of use, and upon the payment of such compensation therefor, as may be ordered and prescribed by said superior court or said judge, with power to change, modify, and revoke such order upon the application of either company.

Running track
of one street
railway over
another.

SEC. 17. This act shall take effect upon its passage, and be deemed an amendment to the charters of all existing railway companies operating cars by motive power other than that furnished by locomotives, dummies, or box engines used on steam railroads, and an amendment to the charters of all existing municipal corporations. All such railway companies and all municipal corporations hereafter chartered shall be subject to the provisions of this act, and all acts or parts of acts inconsistent herewith are hereby repealed. All existing statutory provisions relating to horse railroads and horse railroad companies not inconsistent

Effect of this
act on existing
charters.

with this act, shall be construed to include all street railways and street railway companies of every kind and description, irrespective of the motive power used in operating the same.

Directors to be residents of this state.

SEC. 18. A majority of the directors of all companies hereafter operating street railways in this state shall be residents of this state.

AN ACT CONCERNING RETURNS OF STREET RAILWAY COMPANIES.

[1893, Chapter CCXL.]

Street railway companies to bear proportion of expense of railroad commissioners' office.

The additional printing, office and incidental expenses of the railroad commissioners imposed upon them by an act concerning street railways (public acts of 1893, Chapter CLXIX) passed at this session of the general assembly, the amount to be determined by the comptroller, shall be paid monthly from the treasury, and in July in each year, the whole amount so paid during the year ending the fourth day of July shall be apportioned by the comptroller among the several street railway companies, in proportion to the length of the tracks of their respective railways, and each company and the trustees, assignees, lessees, or other parties operating any such railway shall pay the treasurer their proportion of such amount.

AN ACT CONCERNING THE TAXATION OF STREET RAILWAYS.

[1893, Chapter CCIX.]

Taxation of street railways.

The existing statutes with regard to the taxation of railroads shall be deemed to apply and extend to, and shall include all street railways of every description.

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TENTH ANNUAL REPORT

OF THE

BUREAU OF LABOR STATISTICS

OF THE

STATE OF CONNECTICUT,

FOR THE

YEAR ENDING NOVEMBER 30, 1894.

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LETTER OF TRANSMITTAL.

HARTFORD, December 1, 1894.

To His Excellency, LUZON B. MORRIS,

Governor of Connecticut:

The Tenth Annual Report of the Bureau of Labor Statistics is herewith presented. I have the honor to be

Respectfully yours,

ROBERT J. VANCE,

Commissioner.

GEORGE E. BEARN, *Clerk.*

INTRODUCTION.

INTRODUCTION.

The principal object of the Tenth Annual Report of the Bureau of Labor Statistics is to impart practical knowledge on practical subjects that are being discussed by the citizens of Connecticut. One of the most important functions of a State department which has the range of topics granted to this Bureau is the consideration of pertinent questions which are liable to become subjects of legislation and upon which legislators desire information. The Act under which the Bureau is formed has its limitations—it might well be amended so as to enlarge the plan and scope of the department, but even under its present fundamental law investigations of such a nature as we have outlined and of the character which appear in the following pages, seem to be fully warranted. All of the subjects considered bear directly upon the daily life and well being of the great mass of working people of the State, and thus the Bureau has been enabled to aspire to the accomplishment of several purposes. It endeavors to furnish food for thought by the toilers in the various forms of manual industry and material for consideration by those who desire the advance of their fellows, as well as lawmakers who represent the people and have the interest of the State and its citizens at heart.

It is not the province of the Bureau to advocate the passage of any particular measure, but it is its privilege to furnish material that may find fruition in laws, and to devote its energy—along the lines laid down for it, to presenting conditions, the necessity for changes, and the proper method to approximate ideal results. With this idea mainly in mind the investigations and inquiries of 1894 were conducted and their results set forth in the following pages. The subjects considered were those uppermost in the public mind with which the Bureau could deal, and the facts and conclusions presented summarize a careful and exhaustive search for data as well as the best thought the Bureau could give to a study of information gleaned

from many sources. With the hope that what it has done may be helpful and the desire that some of its work may find expression in tangible results, the Bureau presents the following subjects for consideration:

BUILDING AND LOAN ASSOCIATIONS.

The present condition, as well as the rise and the good accomplished by building and loan associations occupies a leading position in the report. The history of former experiments in this line in Connecticut from 1854 to the time when they were abolished by legislative enactment is given, and the errors of that time in the management of such associations are used as illustrations of what can and cannot be safely attempted now. The disastrous failure of these early associations, combining as they did, the functions of a savings bank and a bank of deposit and discount in many instances, brought building and loan associations into disrepute in Connecticut, and it is only recently that their success in other States has led to a revival of this form of saving here. The different modes of management are outlined in the report, the standing, financial condition, and cost of management of each of the seventeen Connecticut associations is presented, and the passage of a general law, similar in effect to the joint stock act, under which building and loan associations can be organized as well as controlled by some State authority, is advised. This law is advocated, not alone for the benefit of the State associations and the protection of the investors therein, but in order to safeguard those who put their earnings in the so-called national associations, many of which are now doing business in this State. As a guide to possible legislation here and as an index to the restrictions thought to be necessary elsewhere, an abstract of laws passed by various States on this subject is appended to the data and conclusions presented by the Bureau. This subject was before the last General Assembly in the form of several bills, all of which failed of passage, and the Bureau now furnishes the basis for a careful and intelligent consideration of the matter by the incoming State Government.

TRADE AND INDUSTRIAL EDUCATION.

The necessity of the establishment of trade and technical schools as a substitute for the obsolete apprenticeship system, for the training of mechanics and artisans, is urged by the Bureau. The State provides for a literary education leading up to a business life or the practice of the professions, it gives technical training to teachers and

farmers, but ignores the needs of mechanics and the necessities of our great and basic industrial enterprises. A plea is made for the education of the American mechanic who, in the absence of facilities such as European nations maintain and encourage, has to give way before the superior training of the foreigner. What has been done in various cities by private individuals in this direction is noted and commented on, and the most convincing evidence from this country and abroad, is presented as to the practical advantages and immense economic and educational benefits of such institutions. The theory and practice of such schools, particularly in Germany and France, is described, and Connecticut is urged to be first in this new departure in educational functions so positively foreshadowed by the trend of events and the necessities of the situation. This subject was considered by a committee of the last General Assembly in a perfunctory manner, as no data was at hand upon which to base conclusions or formulate legislation, and one object of the Bureau is to supply the deficiency then experienced.

EFFECT OF INDUSTRIAL DEPRESSION.

An inquiry into the effects of the industrial depression, covering the fifteen months from June 1, 1893, to August 31, 1894, and extending over the greater part of the mechanical industries of the State, shows as its general effects that the industrial establishments were in operation about two-thirds of full time, employed about 85 per cent. of the average number employed in 1892, paid in wages monthly about 75 per cent. of the monthly average in 1892, and produced about 75 per cent. of the normal output. In some exceptional industries the ratio of time run, of people employed, of wages paid and of product, was much higher than the foregoing percentages; and in some other industries, notably in woolen goods, cutlery, firearms, and musical instruments, the ratio was much lower. For the majority of the industries, the lowest points of the depression were in January and July of 1894. The conditions in August, 1894, were better than the conditions in August, 1893, in fifteen of the twenty-seven industries in the classification. A little more than one-half of the establishments represented reduced the rate of wages—10 per cent. being a very common cut in rates. In a very few instances part of the wage reduction has been restored.

CHILD-LABOR.

Previous inquiries by the Bureau into the subject of child-labor are supplemented by statistics showing the proportion of school

children who attain a common school education, to which are added facts and arguments from many sources in favor of legislative restriction of this kind of labor, the whole forming a basis for a renewal of the recommendation previously made that the age limit of employment in mechanical and mercantile establishments be raised from thirteen to fourteen years.

DECREASED HOURS AND PRODUCTION.

The efforts to secure decreased working hours by factory operatives seemed to call for some comment on the part of the Bureau, and considerable information has been collected in Connecticut on this subject, the main object being to determine the relation between decreased working hours and production. The conclusions of a number of manufacturers who have reduced the hours of daily labor, or consented to a short day on Saturday, are given on this point, and the results show considerable diversity of opinion. It seems to be safe to assume, from the returns, that in many instances where mechanical skill enters into the production of goods decreased hours result in more concentration of energy and do not decrease product, while where automatic machinery is used a different result ensues. Recent experiments in England in which a decrease of working time has not been accompanied by a lessening of output are given and furnish some interesting data for those engaged in the study of this subject.

PART I.

SAVINGS AND LOAN ASSOCIATIONS.

SAVINGS AND LOAN ASSOCIATIONS.

Connecticut people of the present generation have shown comparatively little interest in the saving and loan association movement. Forty years ago, however, such associations occupied a large share of the public attention in Connecticut, were the objects of annual inspection by the Bank Commissioners, and were the subject of much legislation. In the unfortunate and somewhat disastrous results of the ill-conducted experiment of those earlier days may be found a reason for the present slow growth in Connecticut of a method of co-operation which has in it many advantages for the wage-earner.

Those earlier associations did not appear in the Bank Commissioners' reports after 1867. Beginning in 1884, one modern association has annually, under its State charter, made report to the Bank Commissioners. The other existing associations have not hitherto figured in the report of a State department. Because of this official silence on the subject, it is assumed that knowledge of the methods and purposes of saving and loan associations is confined in Connecticut mainly to those within the limited circle of the operations of such associations. To aid, therefore, to a better understanding of what is to follow in this report, a brief description of a saving and loan association is here inserted.

GENERAL PLAN OF OPERATION.

Tersely put, a saving and loan association is co-operation in the saving and loaning of money. The common use of the word "building" in the title of these associations may be a trifle misleading to the novice. They are not, strictly speaking, building associations. They do not erect buildings, but they loan money to those of their members who desire to buy or to build homes. The better title is, "Saving and Loan Association." But, under whatever title, the object is practically the same, and the methods similar. It should be understood, however, that reference is here

made exclusively to local savings and loan associations, limited in their operations to a small circumscribed territory, and that the so-called national associations, doing business in several States through agents, are not here considered.

The capital of a saving and loan association is the accumulated contributions of its members. Upon the organization of an association, each member pays an entrance fee, or not, as may be determined, and subscribes for a certain number of shares of stock. The ultimate value of a share of stock is generally fixed at \$200, as that sum avoids fractions in calculation of monthly interest payments at an annual rate of six per cent., and simplicity of method is a desideratum in a saving and loan association. A member pays for his stock in installments, usually at the rate of one dollar per month per share, which payments are continued until the stock reaches its matured value of \$200 per share, when the stockholder receives the matured value and the stock is canceled.

Without the addition of interest and other profits, a share of stock, par value \$200, on which one dollar is paid monthly, would reach its matured value in 200 months. But the period of maturity is much lessened by the operation of compound interest, and by the addition of other minor income. When sufficient money has been accumulated in the treasury of an association, it is offered to the members who may wish to borrow. A member may borrow, if funds are available, to the matured value of the number of shares he holds, the security being a real estate mortgage and a pledge of the shares on which the money is borrowed. He will pay on the loan interest at the rate of six (or other) per cent. per annum, payable monthly, and will therefore pay each month, at the six per cent. interest rate, two dollars on each share, one dollar in dues and one dollar in interest. Thus each month's payments, by increasing the value of the stock, increase the value of the security. When the pledged shares reach the value of \$200 each, the loan and stock are canceled and the mortgage released. Money may also be loaned on a pledge of stock, but not in excess of the then existing value of the stock.

It may happen that there will not be sufficient funds on hand to accommodate all who wish to borrow. In that event, priority of loan is generally determined by bids of a bonus or premium, the money going to those who bid the highest for its immediate use. This bonus is sometimes added to the face of the loan; in other cases it is deducted from the face of the loan, but more often it

remains as a fixed monthly charge, and thus becomes, in effect, an addition to the interest payment. In the interest of simplicity of statement, discussion of the merits of the different systems is deferred. However paid, the premium or bonus is an added profit, which aids in shortening the period of maturity of stock.

Other sources of income are entrance fees, fees for the transfer of stock and fees for the withdrawal of stock. Sometimes, also, a small portion of the profits is withheld from the withdrawing shareholder. Fines for default in payment of dues, interest or premiums likewise add a little to the income. Default in payment for a certain fixed period involves cancellation of unpledged stock, or the foreclosure of a mortgage given as security for a loan; but in each case the defaulting shareholder is entitled to the actual value of his stock, less fines or other legal charges.

The expenses in the conduct of an association are comparatively small. Few officers are salaried, and only in small amounts, and to this is added the rent of a place of meeting, printing and other minor items.

The foregoing is a simple description of the methods of a saving and loan association issuing one series of stock. It should be added that stock is generally issued periodically in series, thus attracting new members, who will not have back installments to pay.

There have been many modifications, and there are some remaining, of the preceding outline of a typical saving and loan association, but the modification will appear more naturally in a history of the growth of these associations, and with less liability to confusion in the mind of the reader unfamiliar with such organizations.

ORIGIN OF THE ASSOCIATIONS.

The first authentic information on the subject shows that associations for enabling the subscribers to build or purchase dwelling houses were known in Birmingham, England, as far back as the year 1781. They were similar to modern associations, in the requirement of periodical payments until the aggregate of the sums paid should amount to a specified sum, and in the further requirement of an interest payment on the value of a share by those obtaining property through the association. Each share was to consist of a dwelling house, to be built by the association, and the title to which should remain in the association until the maturity of the share. Priority in the possession of a dwelling was determined by lot. This

description indicates that the associations were building clubs, conducted in much the same manner as a modern watch club.

In the following century, when the associations had become numerous in England and Scotland, improvements in their methods were introduced. That these improvements made the associations types, in many respects, of the modern associations, is apparent from the language of an act of Parliament, passed in 1836, authorizing the establishment of societies "for the purpose of enabling the members to erect and purchase dwelling houses, or acquire other leasehold estate; but it shall be mortgaged to the society until the amount or value of the share drawn on shall be repaid, with interest and all other appropriate payments."

According to another authority, the association plan of saving money was put in practice in China some 2,000 years ago. The account given of these Chinese associations is interesting, if not pertinent. Dr. John Henry Gray, in his "History of the Laws, Manners and Customs of the People of China," says that societies called Lee Woe were instituted by Pong Koong, an official of great wealth, who flourished 200 years B. C. The members paid periodically into the common fund, under penalty of a fine for arrears, bid additional rates of interest for priority of a loan, and repaid the loan in installments, with interest.

INTRODUCTION AND GROWTH IN THE UNITED STATES.

The first building association in this country was organized in Frankford, a suburb of Philadelphia, January 3, 1831, and was named the "Oxford Provident Building Association." It issued a single series of stock, which matured in ten years and six months, when the association was dissolved. Another society was immediately formed. The growth of similar societies in Philadelphia and vicinity was rapid during the decade ending in 1850, in which year laws were enacted providing for their incorporation. From Pennsylvania the associations spread into the adjoining States, and then throughout the country. Philadelphia has been their breeding-place in America, and in that city the results accomplished are remarkable. It was estimated in 1886 that through their operations 100,000 homes had been constructed in Philadelphia alone.

The largest proportionate number of associations is found in the five Middle States of New York, New Jersey, Pennsylvania, Delaware and Maryland. In the total number Ohio ranks next to Pennsylvania, and is followed by Illinois. The associations are

flourishing and growing rapidly in Massachusetts under a model law, and are found in lesser numbers in the other New England States, except Vermont. They are also numerous in Minnesota, Indiana and Michigan, and exist in Iowa, Nebraska, Dakota, Montana and California. There are many in Missouri, and a few are reported in each of the South and Southwestern States.

PRESENT IMPORTANCE OF THE ASSOCIATIONS.

The figures in the Ninth Annual Report of the United States Department of Labor show the present importance of these associations. Their total number, according to that report, is 5,838, and their total net assets are given at \$450,667,594. The homes acquired through this method of co-operation are estimated at 314,755. The accumulations, made through the aid and stimulus of savings and loan associations, must be over one billion of dollars. In New York State the 417 associations reporting for 1892 had a total membership of 166,323, of whom 34,643 were women, and had aggregate assets of \$31,000,000. In a paper read before the American Social Science Association in 1888, Mr. F. B. Sanborn said that "at the rate the building associations are now gaining, the time may come when their accumulated savings at any one time will exceed those of our savings banks." That condition has already been reached in Ohio, in which State, according to the report of the Inspector of Building and Loan Associations for 1892, the assets of the associations exceeded the combined capital of the national, the savings and the private banks by about eleven millions of dollars.

CHANGES IN METHODS.

As the associations have grown in number, they have changed materially the plan of operation. The earliest and the simplest form of the scheme, and one which remains to a limited extent, is known as the Terminating Plan. Under this plan stock is not issued in series, and each share, when issued, is made to date back to the first payment of dues, so that shares issued years after the origin of the association are required to be made equal to those first issued, by back payments equal to the accumulated value of the old shares. The effect of this plan in operation was to discourage a growth in membership, the first payment required being beyond the means of many who might otherwise desire to be members. Checking the growth of membership checked also an increase in the number of borrowers, with the result that capital increased beyond the

demands for it on the part of members, thus necessitating less profitable investments or some plan of forcing the non-borrowing members either to withdraw or borrow.

The remedy for this trouble was found in the serial issue of stock. This made the association continuous, encouraged growth in membership and consequently increased the number of borrowers, thereby lessening the likelihood of an unprofitable accumulation of funds. As a further safeguard, withdrawals on the part of non-borrowing members were encouraged by increasing the percentage of profits on withdrawn stock as a series approached maturity, and provision was made for a forced withdrawal, at full profit, of unpledged shares after a series had run a certain number of years. These provisions operated to materially reduce the number of free or unpledged shares at the date of maturity of a series, and prevented the recurrence of an experience which befel some earlier associations, which were under the harrassing necessity of devoting the greater part of their funds to the payment of unpledged mature shares, instead of loaning the money at a profit.

MODIFICATIONS IN PREMIUM FEATURE.

Other important modifications in the development of the plan of savings and loan associations relate to the matter of bonus or premium. The oldest premium plan is that known as the gross plan, under which the borrower paid the premium in advance, and was charged interest on the gross amount of the loan. Put concretely, the borrower who obligated himself for a loan of \$1,000, on which he paid \$50 bonus or premium, received \$950 and paid interest on \$1,000. The injustice of requiring the borrower to pay interest on money which he did not obtain, led to a modification of the plan whereby interest was charged only on the net sum received by the borrower. This was called the net plan.

Lack of financial skill of management involved many associations conducted on this plan in difficulties. The payment of a loan before maturity entitled the borrower, of course, to a rebate of a proportionate amount of the premium. The returnable portion of a premium should therefore have been regarded as a liability. But many associations counted the whole premium as a profit earned, and divided it in dividends on the stock. The result was an exorbitant rate of profit in the earlier years of the life of an association, followed by heavy withdrawals of unpledged stock when the dividend rate began to fall. Those who could withdraw profited at the

expense of those who, having borrowed on their shares, could not release themselves; and in the event of the repayment of a loan before maturity, and the necessity of rebating a premium, the association found itself in the condition of one who had followed the disastrous practice of paying cash and giving credit.

To remedy this, and in the further very commendable desire of simplicity of method, the installment plan was devised. As at first practiced, the premium bid was divided into as many parts as there were months in the assumed period in which the stock was to mature, and one part was paid each month. As the actual period of maturity sometimes exceeded the assumed period, a gap was left between the time when premium payments ceased and the loan matured, with the result that the repayment of a loan before the assumed time of maturity involved the rebate of a disproportionate share of the premium. The plan now generally followed is to make the premium a rate per cent., payable monthly with the interest during the continuance of the loan. This was the plan adopted in the law of Massachusetts, since modified by an amendment to the law providing that the bid for loans may, "instead of a premium, be a rate of annual interest upon the sum desired, payable in monthly installments," such bids to "include the whole interest to be paid at any rate not less than five per cent. per annum." This was a further step in the direction of simplicity, and for that reason is finding favor.

EQUITY AND INEQUITY OF THE PREMIUM.

Recently a movement has been inaugurated among associations in Ohio to abandon the premium charge to borrowers, and thus further to simplify the loan. Premiums are not a necessary adjunct of a saving and loan association. They were introduced as the most equitable means of determining priority of loan, and they proceed on the theory that the one who anticipates the matured value of his shares, and has the immediate use of his money, should pay a bonus for that privilege, as it is assumed that he will profit by the use of the money. It should not be overlooked, however, that he pays interest for the use of the money, which interest is, in itself, a bonus for immediate realization of the value of his shares. When the demand for money is not in excess of the supply, no bonus need be paid. The premium, then, represents a higher interest rate, following upon an excess of demand over supply, within the limited circle of operation of the individual association. It may be paid by

some and not by others, and thus, in its operation, it may fail to result equitably between borrowing members, as it certainly does not do equity between the borrowing and the non-borrowing shareholders. It is true that the payment of a premium increases the profit to the association, and that the one who pays the premium receives back a portion of it in the lessened time which is required to mature his stock. But as the pledged shares are only about one-quarter of the total number of shares, it follows that those who pay the premiums receive only about one-quarter of the benefit accruing thereby. As has been said, the only legitimate excuse for the premium plan is that it is the most equitable means yet devised to settle conflicting claims of would-be borrowers. It is something which may remedy itself in time. In Ohio the premium and interest rates in the loan associations have steadily been falling, and now the average of the two combined is less than the legalized rate of interest. This has probably been the reason for the abandonment of the premium by some Ohio associations.

THE PLAN OF NET REBATE.

In Ohio, also, originated another modification, the so-called "Ohio plan of net rebate," which affects the interest paid and gradually reduces it. It consists in deducting at certain stated periods the amount of monthly installment dues paid from the principal of the mortgage loan, and charging interest thereafter only on the balance. This is eminently fair to the borrower, to whom much consideration should be shown, as he is the life of a saving and loan association. Some Pennsylvania associations, pursuing this plan of net rebate, exclude pledged shares from participation in the profits, on the theory that dues credited as a part payment on a loan cannot also be regarded as invested funds.

Much more might be written of modifications and experiments made in the life of the saving and loan association movement, but the foregoing will suffice for present purposes. The way is now cleared for a history of saving and loan associations in Connecticut.

THE EARLIER ASSOCIATIONS IN CONNECTICUT.

The words "savings bank" appeared in the title of each of the earlier associations in Connecticut. As the title indicated, the associations were savings banks as well as loan associations. The

first law authorizing them was passed in 1850. It provided that any number of persons, not less than twenty-five, might associate for the purpose of establishing a saving and building association, entitled "to receive from any person or persons any deposit or deposits of money, in the form of stated payments upon shares of stock or otherwise, not exceeding in any one year from one person the sum of \$1,000; to loan money to its members upon real or personal security, or upon the pledge of the borrower's stock in said association; to receive interest for money so loaned monthly, quarterly, semi-annually or in advance; to receive for such loan or loans, in addition to the legal rate of interest paid as aforesaid, such a bonus as the parties in each case may agree upon; to loan money to persons not members of said association at the legal rate of interest, provided no member of said association who can furnish good and sufficient security therefor applies for it," to purchase and hold real estate necessary for the conduct of its business, and such as may be mortgaged to it as security for loans; and to invest such funds as cannot be loaned to its members upon sufficient security in the bonds of any city, the stock of any incorporated bank in Connecticut, the bonds of the States of Massachusetts and New York, and the bonds of the United States.

Each association created under the law was forbidden to establish any branches or agencies, or to do business at any other place than its office; and was required to make annually to the General Assembly a full and sworn statement of its condition. It was provided, also, that upon the application and affidavit of depositors, shareholders or creditors of any association having interest in or claims on the association to the amount of \$5,000, a judge of the superior or county court might order a strict examination to be made of the affairs of the association. The association had, at all times, according to the law, a lien upon all the stock, deposits or property of its members, shareholders or depositors for all debts due to the association from such shareholders, depositors or members.

OF RAPID GROWTH.

A few associations existed before the enactment of the law, the first of which record is had being one in Whitneyville, a suburb of New Haven, which began business in November, 1849. Following the passage of the law, the number of associations rapidly increased. By a legislative act of 1853 it was made the duty of the Bank Com-

missioners to visit and examine once in each year, or oftener, each saving and building association, and to make a report thereon to the General Assembly. In the following year the commissioners reported the existence of thirty-four associations, which were declared to be "doing a successful and prosperous business." They had an aggregate of deposits, January 1, 1854, of \$1,774,904.98, of which amount \$819,560.41 were paid in by stockholders and \$955,344.57 by depositors. Their loans to members at that date were \$1,639,462.46, and to persons not members \$56,811.30.

COMMENDED BY THE BANK COMMISSIONERS.

The report of the commissioners for 1854 was generally commendatory. They found that the associations were "under the control of gentlemen of the highest respectability, and, so far as we have been able to discover from a thorough investigation of their affairs, are managed in strict conformity with the requirements of the law, although one of them has, in a single instance, committed the error of borrowing money and paying more than six per cent. per annum for its use. Upon a careful inquiry, and as thorough an examination as we could make, we have no hesitation in saying that their loans are made with great care and upon first-class securities. The object of the Legislature in authorizing their formation seems to have been to hold out the strongest inducements to the laboring classes to provide themselves with homes and the means of future support by making gradual savings from their earnings. The savings banks had done much in furtherance of that object, but had not fully accomplished it. It is claimed that the new system fully answers the purpose for which it was established."

Elsewhere in the report the commissioners said: "The new principle in the law to which we have alluded, authorizing a greater rate of interest than six per cent. per annum to be taken by these associations upon their loans, appeared to us at the commencement of our official examination to be founded in wrong, and calculated to do, in many cases, injustice. But, on inquiry, we learned that those who, as we supposed, most needed the protection which usury laws afford were the strongest supporters of the principle. They urged, in support of their position, that they had been compelled to pay for the houses which they had lived in for many years a rent equal to ten or twelve per cent. per annum upon their cost, and that they would be enabled, by paying to these associations a rate of

interest, including the bonus, much less than that, to build comfortable tenements for themselves, and pay for them in six or eight years. That these associations hold out the strongest inducements to persons in middling circumstances, and to those who would wish to provide for themselves and families in case of accident or misfortune to save their surplus income, must be admitted."

ON INSECURE FOUNDATION.

Lack of comprehension of the true purposes of a saving and loan association, and of the principles upon which it should be conducted, is apparent, both in the provisions of the Connecticut law of 1850 and in the first report of the Bank Commissioners on the subject. The law, in the first place, made the associations banks without throwing about them any of the safeguards of banks. It is the business of a bank to receive deposits, repayable at any time. It is the business of a saving and loan association to safely invest the accumulated savings of its members. Its funds, consequently, should be tied up in mortgages of a fixed nature. It is difficult to reconcile the two businesses under one management. Either so large a reserve must be maintained as to make the undertaking unprofitable, or else, in the event of a sudden large demand for money, the association must collapse. There is the further danger involved in the fact that men may not be as careful in investing other people's money as when they are handling their own, and that advances for speculative purposes may result in disaster.

As has been seen, the deposits in the Connecticut associations at the beginning of 1854 were in excess of the capital stock paid in, and were vastly in excess of the negotiable securities held. The legitimate banks at that date were not paying over five per cent. interest on deposit. The associations organized under the act of 1850 promised six per cent. So abundantly did the money pour in that it became necessary to loan in large sums to individuals, which a saving and loan association cannot prudently do. One association reported a loan, or loans, to one individual of \$10,000, another association one of \$12,000, and two other associations each individual loans of \$16,000. Even this liberality to possible speculators did not avail to reduce the surplus, and money was loaned freely to parties not members of the associations. Loans on personal security grew until in 1858 they exceeded the mortgage loans; large investments were made in stocks and bonds; railroads out of the

State were aided with loans; questionable real estate security, in and out of the State, was accepted; and paper was even discounted on the street.

THE RESULTS OF LOOSE METHODS.

Natural results followed from these loose financial methods. A partial report of suspended paper in 1855 showed a total of over \$16,000, which had grown (still only partially reported) to \$75,000 in 1856, and to \$165,000 in 1857. Foreclosures became common, a total of forty-four in suit being reported in May, 1859. The losses from this source were large. The association in Bristol reported, in 1857, that it had suspended \$41,850 of permanent loans and \$30,712 of temporary loans, and had taken \$10,875 worth of real estate for loans, making a total of \$83,437 of unavailable assets, on which a loss of \$30,000 was estimated. Another example was furnished by a New Haven association, which had matured its first series of stock in six years and eleven months, the shareholders receiving about sixty per cent. interest. This series, the Bank Commissioners reported in 1858, "was paid off without deducting any per centage for possible or probable losses, by which serious injustice was done to holders of the after series of stock. The second series is now nearly full, and the dividends have been credited regularly to the stock without retiring losses or making any provision for them. The association now holds real estate amounting to over \$60,000, which has fallen into their hands either by surrender or foreclosure. On this amount a serious loss must be sustained, and they should be restrained from paying up any further series of stock until their losses are provided for."

EXCESSIVE PREMIUM.

An explanation of how an association could mature stock in less than seven years involves the details of a feature of operation which contributed largely to the failure and downfall of the associations. That feature was the excessive bonus collected on loans, and the manner of accounting employed in connection therewith. From that alone flowed the results which the Bank Commissioners, in 1854, described as a successful and prosperous business. The law of 1850 placed no limit on the amount of bonus that could be accepted. Excessive rates were paid, the reports for 1853 and 1854 showing for many associations larger receipts from bonus than from interest. Where the bonus was paid in monthly installments it

varied from one-half to three-quarters of one per cent. per month on real estate loans; on other loans it was one and a half to two per cent. per month. When it was paid in advance for the whole period of the loan, which was a common method, it rose in many associations to twenty-five per cent., in one exceptional case to twenty-six per cent. and in another to twenty-seven per cent. So glaring became the evil that, on the request of the Bank Commissioners in 1855 for additional legislation, the General Assembly fixed the maximum bonus on real estate loans, when taken for the whole period of the loan, at twenty-five per cent., or one-half of one per cent. when taken monthly. At the same time it limited the maximum bonus on a temporary loan to one-half of one per cent. monthly, and decreed six per cent. per annum to be the maximum interest rate at which a loan of any kind could be made to any person not a stockholder.

PHENOMENAL DIVIDENDS.

Great as was the evil of unrestricted usury in the shape of excessive bonus, a greater evil, in its effect upon the life of the associations, was the method by which the bonus, taken in advance for the entire period of the loan, was accounted for. The entire amount was immediately entered as a profit earned, and was distributed to the stock in the shape of dividends. The dividends, under this system of finance, were, in many cases, phenomenal. An annual rate of from twenty to twenty-five per cent. was frequent; several associations credited stockholders with from forty to fifty per cent., while one reported the exceptional and gilt-edged rate of seventy-five per cent. A Waterbury association which, during the year ending in April, 1855, had reduced the number of its shareholders from 725 to 700, and the number of shares of stock from 3,530 to 3,502, reported an increase for the year of capital stock from \$52,559 to \$122,475. A New Haven association doubled its capital in a year, though its shares of stock only increased from 5,263 to 5,724; while a Bridgeport association, with an increase of only fifty-three in the shares of stock issued—from 835 to 888—more than trebled its capital stock in fifteen months.

It was "a prosperous and successful business" for stockholders who were shrewd enough to withdraw early and take the large dividends credited to their stock. An incomplete report for 1854 of the shares withdrawn makes the aggregate value \$11,277. This movement assumed large proportions in the succeeding years, when

the nature of the business and restrictive legislation reduced the bonus rates, and dividend rates rapidly fell until in some associations they were less than savings bank dividends. For the last quarter of 1855 the amount of shares withdrawn was \$124,453, and one association reported that all its receipts for the quarter had been used in paying depositors and withdrawing shareholders. The depositors dropped out even faster than did the stockholders. In the last quarter of 1856 the stock withdrawn aggregated \$110,846. A Meriden association reported a deficiency of 2.77 per cent. on the capital stock, "caused by amount of bonus allowed withdrawing members." In the light of these developments, it is not surprising to find in later reports announcements that many stockholders, especially those who were borrowers, had defaulted in their payments. The borrowers, who could not withdraw, were beginning to see how they had been fleeced.

MORE LEGISLATIVE RESTRICTIONS.

To return to the chronological history of the associations: They numbered forty-eight on January 1, 1855, according to the Bank Commissioners' report, had in capital stock a total of \$1,876,063, and a total in deposits of \$1,635,395. The General Assembly of that year, in addition to limiting bonus and interest rates, endeavored to confine the associations more closely to their legitimate membership and purpose. It required, under a penalty of \$500 forfeit for each offense, that all installments of stock be payable at the rate of one dollar per month per share; and that three-fourths of all the moneys received, whether as installments on stock, as deposits or otherwise, be loaned to stockholders holding such number of shares of stock as, when full, would equal the amount loaned, and that all such loans be secured by mortgage on unincumbered real estate situate in Connecticut.

The Bank Commissioners, in their report in May, 1856, state that these enactments were judicious and had removed some of the objections against the associations, but there was need, the commissioners added, of more legislation. The class of associations issuing series of shares of \$200 each, on which one dollar was paid monthly, and loaning their funds mostly to shareholders on real estate security, taking the bonus out for the whole time, were reported to be in a highly prosperous condition, and to be administering their affairs strictly in accordance with law. The associations taking a monthly bonus were also reported as equally well managed,

but as having got into difficulty because of a Supreme Court decision that the bonus so taken was usurious and illegal. Loans so made, in good faith, were liable to be contested on the ground of usury, and the commissioners recommended that the loans be legalized, pointing out that any other legislation looking to the closing up of the associations and the foreclosing of the mortgages would be attended with great loss on the part of the borrowers. A further recommendation was made that no more series of stock should be issued except to those who wished actually to become borrowers for the amount of stock subscribed.

OPERATING AS BANKS OF DISCOUNT.

The commissioners thus denounced the organizations having a nominal capital, with a certain amount paid in: "Their business has been to receive all the deposits they could obtain at six per cent., and to loan them at the best rate they could get, principally on notes and personal security, without much reference as to whether they loaned to stockholders, as the law requires, when the rate of interest is above six per cent., or to indifferent persons. They have no monthly payments on stock, and very few loans upon real estate—and we cannot regard them in any other light than simply banks of discount and deposit, organized under a law which they have construed to suit their own views, and under which, with the aid of large deposits, they have succeeded in making very large dividends upon a very small cash capital—some of them as high as forty and fifty per cent. These banks have generally for directors and managers men of the first standing for probity and wealth in the community, and it is not strange that they have been able to obtain large amounts of deposits at six per cent., more especially as the regular banks are prohibited from paying more than four per cent., and the chartered savings banks, until recently, have rarely paid more than five per cent. This class of institutions, although organized under the law establishing savings banks and building associations, cannot lay the slightest claim to the title of building associations, for they have but very little loaned upon real estate, and very little to their own shareholders. The Fairfield County Association, at Norwalk, has closed. The Mechanics and Farmers', at New London, is now closing, and we think it for the best interest of the State that the institutions which we have thus specified should be prohibited from transacting further business."

There were at this date about six of these associations. The nominal capital was generally \$100,000, from five to fifteen per cent. of which was paid in, the balance being notes indorsed to the acceptance of the directors. The first of this class was the Hartford County Savings Association, and it will serve as a specimen, as it was probably a pattern. It began business in February, 1851, with a nominal capital of \$100,000, fifteen per cent. paid in. The directors elected were men of the highest standing and responsibility, and they solicited deposits at six per cent. At the first examination made by the commissioners, it was found that the association had obtained \$390,000 in deposits, and had indorsed upon the stock notes and credited to the capital stock \$27,500 of earnings in less than four years. The association paid no attention to the provisions of the law requiring that three-quarters of the funds be loaned to stockholders on real estate security, and prohibiting loans to other than stockholders at more than the legal rate of interest. It made loans to railroads out of the State, and discounted paper on the street, being solely solicitous to get a high rate of interest. Its managers were grossly careless, and its treasurer absconded in January, 1858, leaving a deficit of over \$150,000.

The General Assembly did not adopt the recommendation of the commissioners to legislate this class of associations out of existence, and they remained, in the words of the commissioners, "to distract the minds of the whole community on the subject of interest, and to give a fictitious value to money."

At the date of the 1856 report fifty associations were in existence, and this was the high-water mark in number of associations. Reports from forty-three associations, the others not reporting, showed aggregate capital of \$2,537,332; deposits of \$1,630,995 (which amount would have been swollen to over \$2,000,000 if all the associations had reported), real estate loans \$2,741,013, loans on personal security \$1,141,821, number of shareholders 9,060, of whom 3,532 were borrowers, and number of depositors 9,061.

LEGISLATIVE RELIEF FOR THE BORROWERS.

At the legislative session of 1856 the healing act, recommended by the Bank Commissioners, was adopted, validating all association loans, which were not, because of the bonus collected, to be held as usurious or illegal. But it was also provided that upon loans so legalized no bonus was thereafter to be taken of a greater rate than

one-half of one per cent. per month, and if a greater rate was taken the contract or loan would not be confirmed or rendered valid by the healing act.

It was further made lawful for any party holding such legalized contract or loan to withdraw from the association making the loan on or before January 1, 1857, upon surrendering to the association his shares of stock upon which the loan was predicated, and paying to the association such sum as was found to be due, by charging the party with the principal sum loaned to him with interest thereon at the rate of twelve per cent. per annum, and crediting the party with the amount of all his payments to the association, whether by way of interest, bonus, installments on stock or otherwise, together with interest upon such installments of stock, from their respective payments, at the rate of twelve per cent. per annum; and if the association should refuse to accept the sum so found to be due and to execute a valid release of the security, then the association should be entitled to receive only the principal amount loaned.

Section 2 of the act of 1856 was as follows :

"No corporation shall be hereafter organized under the law authorizing the establishment of savings and building associations, approved June 22, 1850, unless all the stock shall be owned and held by borrowers of such corporation to an equal amount of their respective stock when fully matured, nor shall any such corporation heretofore organized increase its capital stock, by the issue of new shares, except to such persons as shall borrow upon permanent loan of such corporation a sum of money not less than the amount of their respective shares of stock when so matured, the bonus being payable monthly, or deducted from said sum in advance, as the case may be."

The foregoing enactment was naturally followed in 1858 by a repeal of the section of the act of 1855, which required that three-quarters of the money received be loaned to stockholders holding such number of shares as when matured would equal the amount loaned.

No considerable number of borrowers took advantage of the act, giving them the privilege of settling their loans by the payment of twelve per cent. per annum. There was a notable decrease, however, in the number of shareholders and in the number of shareholders indebted for loans, due to the efforts of the associations to cancel stock of the earlier series. January 1, 1857, the number of shareholders had been reduced to 7,229 and the number of shareholders indebted for loans to 3,169. There was a reduction also,

from the date of the previous report, in the amount of capital stock and of real estate loans, but an increase in the amount of deposits and of loans on personal security. Four associations were reported as having closed. This significant paragraph was found in the report of the Bank Commissioners for 1857:

"In our regular banks no person is allowed to be a director in two institutions at the same time, and in our judgment this rule should apply to building associations also. We find that many of our bank directors are presidents, vice-presidents and directors in the building associations, and we consider this is bringing six per cent. and twelve in altogether too intimate a connection to preserve the proper proportion of both."

Forty-two associations reported before the legislative session of 1858, thirty-six of them doing business according to law, the Bank Commissioners said, and six disregarding the law. The capital stock remained about the same as in the preceding year, being a total of \$2,391,302; deposits were increased by about \$150,000 to a total of \$2,390,643; loans on personal security were swollen to \$2,644,208, the balance of assets being loans on real estate or investments in stocks and bonds; shareholders had fallen in number to 6,156, and shareholders indebted for loans to 2,450.

LEGISLATING THE SOCIETIES OUT OF EXISTENCE.

Steps were taken at the legislative session of 1858 to wind up the associations. A law was passed, making it the duty of the directors of any association, upon the request of ten stockholders therein, to order the secretary to notify the Bank Commissioners to examine the affairs of the association. The Commissioners should forthwith make an examination and an appraisal of the stock of each stockholder at its just value, and when an association had received a bonus on its loans for the whole period at the time of making a loan, such deduction should be made from the profits credited to the earlier series, and such additions made to the later series as should equalize, as nearly as practicable, the profits of the institution among the different series of stockholders. The Commissioners were directed to lodge a copy of their appraisal and adjustment with the treasurer of the association, from which adjustment an appeal might be taken by any aggrieved party, within ten days, to any Judge of the Superior Court, whose decision should be final.

When such adjustment should have been made any stockholder who had made a permanent loan could have the whole of such ascertained value of his stock applied to such loan, and on the balance, if any, remaining due on his loan, no bonus of a greater than one quarter of one per cent. a month should be payable, and he should thereupon cease to be a stockholder in the association; but if the stock of any such borrower should be more than sufficient to pay his note or loan, then enough to cancel said note or loan should be applied to that purpose, and the remainder should be treated as the stock of a non-borrowing stockholder. It was further provided that any borrower should at all times have the privilege of paying the amount due on any loan theretofore made; and in case no application should be made for appraisal and adjustment, all payments made on stock by the borrower, with interest at six per cent. per annum, payable semi-annually in advance, should be credited on said loan; and if the value of the stock should be found to be greater than the payments made on the same, with the interest added, then the whole value of the stock should be credited on the loan.

It was also provided that no new association should be thereafter formed under the act of 1850, and that no existing association should take any bonus on any loan thereafter made, or a greater rate of interest than six per cent. per annum, and that no association should thereafter issue any new stock. Any association refusing to comply with the provisions of the act was forbidden to receive any further deposits, or to make any further loans, upon a penalty of a forfeiture of \$100 for each and every offence.

The law also provided that any association desiring to close its business, after having ascertained the value of its stock in the manner provided by the law, should first pay or secure to be paid all debts due depositors, to the satisfaction and acceptance of depositors. Any stockholders who were borrowers might then have the value of their stock applied upon their loans, in the manner provided by the law, and the balance remaining due on such loans unless paid in cash, was to remain a loan, with interest at the rate of six per cent. per annum, payable semi-annually in advance. All payments upon stock in the association should thereupon cease, and all stock should be cancelled, and the value of the stock of each stockholder should be made a claim against the association, and all the assets of the association, after first securing the depositors, should be held by the association in trust for the benefit of the

stockholders, and the avails thereof should be collected and distributed ratably among them from time to time as the association should order; but so long as any depositor should remain unpaid, the funds should be applied to that purpose. Any association might accept the provisions of this part of the act by a major vote of the stockholders, voting by shares of stock, and the association should thereafter cease to receive deposits, and should only make such loans as should be necessary in the judicious management of its affairs while liquidating the same, and such loans should be at a rate not exceeding six per cent. per annum payable semi-annually in advan

THE END OF THE EXPERIMENT.

In the following May the Bank Commissioners reported that the act of the previous legislative session was fast accomplishing its purpose, and that the associations would wind up and disappear quite as rapidly as could be done without inflicting great injustice upon the borrowers.

To further discourage deposits in the associations, the General Assembly of 1859 levied a tax of one fourth of one per cent. upon the total amount of deposits and stock in such associations. This was followed in 1860 by a law forbidding any association to receive after January 1, 1862, any deposits of money whatever, the penalty being a forfeiture for each offence of a sum not less than \$100.

In May of 1860 there were 27 associations in existence, all except five of which were in process of liquidation. A year later the number was four less, and those remaining were making arrangements to transfer what was left of their business to the savings banks. The number in 1862 was 19. This was reduced to 16 in 1863 and to nine in 1864. The deposits at that date amounted to \$27,419, the bulk of which belonged to parties who could not be found. At the suggestion of the Bank Commissioners the Legislature in 1865 decreed that associations pay to their depositors what was due them on or before July 1, 1866, and if any depositors could not be found, to deposit the sums due such depositors with the Treasurer of the State, who was required to advertise the deposits and to pay the depositors when found. In May, 1866, three associations remained, one in Hartford, one in New Haven and one in Norwich. The latter was the only one to report in May, 1867, and that association came to an end during that year.

EXISTING ASSOCIATIONS IN CONNECTICUT.

The present associations in Connecticut are vastly different from those whose disastrous history has been briefly narrated in preceding pages. Organized on a different basis, conducted on business principles, and profiting by the experience of older associations elsewhere, the existing associations in Connecticut have been modestly doing good work, encouraging thrift and aiding in the creation of Connecticut homes. There are sixteen of these local associations in the State, and their names (omitting the generic part of the titles and giving only the specific, which, in each case, indicates locality) appear in the following table, together with the date of organization, the legal status and the authorized capital.

ORGANIZATION AND CAPITAL.

ASSOCIATION.	When Organized.	Chartered or Voluntary.	Total Authorized Capital.
New Haven Co-operative, .	April 14, 1881	Chartered.	\$ 500,000.00
New Britain,	April 27, 1886	Chartered.	1,000,000.00
Meriden First Mutual, . .	April 2, 1887	Chartered.	500,000.00
Meriden Second Mutual, .	Jan. 20, 1888	Chartered.	500,000.00
Meriden Permanent, . .	Oct. 16, 1888	Chartered.	1,000,000.00
Bridgeport,	Dec. 5, 1888	Chartered.	300,000.00
Hartford,	March 19, 1889	Chartered.	Unlimited.
Middletown,	May —, 1889	Chartered.	600,000.00
Shelton,	June 5, 1889	Chartered.	300,000.00
Norwalk,	Aug. 20, 1889	Chartered.	300,000.00
Rockville,	Jan. —, 1890	Chartered.	1,000,000.00
New Haven,	Oct. 23, 1890	Chartered.	1,000,000.00
New Haven Progressive, .	Dec. 31, 1890	Chartered.	500,000.00
Willimantic,	March —, 1891	Chartered.*	1,000,000.00
Manchester,	April —, 1891	Voluntary.	1,000,000.00
Stamford Co-operative, .	June 5, 1893	Chartered.	Unlimited.

All except one of the associations are chartered, and the combined authorized capital of the associations—omitting two in which the amount is not limited—is \$9,500,000. The first of the associa-

* In 1893.

tions has been in existence over thirteen years, but the majority of them are not yet six years old. Yet, in their brief life, they have accumulated much capital, the combined assets at the end of the last fiscal year of each association being nearly \$800,000, which amount, at the date of the issuance of this report, has probably been swollen to a million dollars. Something over eighty-nine per cent. of the assets are mortgages on real estate in Connecticut, for the most part homes of members of the association. Despite the business depression, the forfeited shares and the arrears of members constitute comparatively trifling amounts. These and other facts of equal interest are stated in this tabulation of assets and liabilities :

ASSETS AT CLOSE OF LAST FISCAL YEAR.

ASSOCIATION.	Mortgage Loans.	Stock Loans.	Cash on Hand.	Arrears of Dues, Etc.	All Other Assets.	Total.
New Haven Co-op.,	\$ 46,400.00	\$ 3,475.00	\$ 3,440 65	*	\$ 20.00	\$ 53,335.65
New Britain, . .	75,514.15	625.00	5,022 24	455.09	233.35	81,849.83
Meriden First Mut.,	58,185.82	....	1,763 27	† ....	....	59,949.09
Meriden Second Mut.	58,261.05	....	1,069 82	†	363.09	59,693.96
Meriden Permanent,	49,242.24	3,918.24	2,213 22	† ....	....	55,373.70
Bridgeport, . .	79,175.00	4,625.00	6,311 94	84.00	‡5,342.26	95,538.20
Hartford, . . .	56,144.87	7,370.60	5,098 28	124.66	....	68,738.41
Middletown, . .	51,400.00	3,450.00	6,671 22	317.00	179.53	62,017.75
Shelton, . . .	9,900.00	250.00	1,617 00	72.25	196.96	12,036.21
Norwalk, . . .	61,400.00	2,100.00	5,474 40	100.14	....	69,074.54
Rockville, . .	71,700.00	1,275.00	1,991 47	117.90	160.34	75,244.71
New Haven, . .	27,400.00	265.00	391 40	134.54	170.00	28,360.94
New Haven Prog.,	11,600.00	565.00	477 34	213.18	209.93	13,065.45
Willimantic, . .	20,800.00	....	3,582 34	†	93.66	24,476.00
Manchester, . .	27,400.00	525.00	2,808 41	254.20	185.37	31,172.98
Stamford Co-op., .	....	....	352 14	75.46	250.00	677.60
Totals, . . .	704,523 13	28,443 84	48,285 14	1,948.42	7,404 49	790,605.02

* Arrears of dues not considered an asset.

† Not considered an asset.

‡ Real estate.

LIABILITIES AT CLOSE OF LAST FISCAL YEAR.

ASSOCIATION.	Capital or Share Account.	Forfeited Shares Account.	Undivid- ed Profit.	Advance Pay- ments.	All Other. Liabili- ties.	Total.
New Haven Co-op.,	\$ 53,277.20	\$	\$ 58.45	\$	\$	\$ 53,335.65
New Britain, . .	78,514.27	25.85	193.63	187.00	*2,929.08	81,849.83
Meriden First Mut.,	49,675.09	....	1,708.47	405.13	†8,160.40	59,949.09
Meriden Second Mut.	51,970.38	...	1,027.56	....	†6,696.02	59,693.96
Meriden Permanent,	35,678.27	227.55	4,708.71	....	\$14,759.17	55,373.70
Bridgeport, . .	95,037.81	....	500.39	....	....	95,538.20
Hartford, . .	67,293.20	....	1,311.73	91.98	41.50	68,738.41
Middletown, . .	61,594.21	312.72	4.82	106.00	....	62,017.75
Shelton, . .	10,381.00	....	1,625.21	....	30.00	12,036.21
Norwalk, . .	63,454.25	....	369.82	50.47	||5,200.00	69,074.54
Rockville, . .	67,488.00	168.84	7,470.87	117.00	....	75,244.71
New Haven, . .	24,814.23	39.07	13.64	42.00	††3,452.00	28,360.94
New Haven Prog.,	11,544.01	26.84	2.60	57.00	**1,435.00	13,065.45
Willimantic, . .	22,476.00	....	....	....	2,000.00	24,476.00
Manchester, . .	28,632.00	....	2,515.98	25.00	....	31,172.98
Stamford Co-op.,	610.10	....	...	67.50	....	677.60
Totals, . .	722,440.02	800.87	21,511.88	1,149.08	44,703.17	790,605.02

Semi-annual reports, issued six months from the date for which the preceding figures were compiled, show that the assets of the Bridgeport association have grown to \$100,890, of the Hartford association to \$78,224, and of the Middletown association to \$70,261.

The cash receipts in the last fiscal year, including cash on hand at the beginning of the year, were \$419,047.33. Omitting repayments of loans and cash on hand at the beginning of the year, the receipts for the year were \$272,447.58—over a quarter of a million

* Borrowed money.

† Including \$7,302.21 of unearned premiums.

‡ Including \$5,846.02 of unearned premiums.

§ Including \$14,658.17 of unearned premiums and money due borrowers.

|| Due borrowers.

†† Due borrowers \$3,450.

** Including \$1,400 borrowed money.

dollars from fees, dues, interest, premiums and fines. During the year over \$225,000 were loaned to members, and \$134,000 were paid to members who withdrew their stock. Of the total disbursements for the year, sixty-one per cent. was for loans and thirty-six per cent for withdrawals. The contrast between the percentages indicates the prosperity of the associations even during a year of business depression. The receipts and disbursements for the year have been thus grouped :

CASH RECEIPTS LAST FISCAL YEAR.

ASSOCIATION.	Cash on Hand at Beginning of Year.	Dues and Fees.	Interest and Premiums.	Fines.	Loans Repaid.	Total.
New Haven Co-op.,	\$ 9,489.55	\$ 18,048.00	\$ 2,424.94	\$....	\$ 7,649.97	\$ 37,612.46
New Britain, . .	1,740.12	23,023.26	3,889.99	128.27	6,150.97	34,932.61
Meriden First Mut.,	4,568.08	7,109.19	1,446.04	14.95	8,853.25	21,991.51
Meriden Second Mut.	2,315.88	*9,721.49	954.28	....	5,983.85	18,975.50
Meriden Permanent,	2,439.31	11,859.10	2,563.40	†198.46	14,438.23	31,498.50
Bridgeport, . .	3,321.99	28,896.25	5,270.51	129.36	8,560.72	46,178.83
Hartford, . .	4,579.97	25,805.32	4,074.72	187.13	16,272.00	50,919.14
Middletown, . .	2,236.00	19,597.70	3,353.79	76.27	8,128.00	33,391.76
Shelton, . . .	1,503.47	2,367.00	929.25	.50	4,000.00	8,800.22
Norwalk, . .	2,106.74	20,531.00	4,122.59	90.61	12,700.00	39,550.94
Rockville, . .	3,677.13	23,276.50	3,846.68	55.03	875.00	31,730.34
New Haven, . .	3,220.04	11,419.25	1,031.71	28.64	4,814.00	‡23,313.64
New Haven Prog.,	1,450.80	6,524.50	703.04	51.03	1,068.00	\$10,677.37
Willimantic, . .	1,928.68	9,397.09	1,163.83	....	2,500.00	14,989.60
Manchester, . .	28.00	||12,249.00	1,587.67	17.92	....	13,882.59
Stamford Co-op.,	....	601.00	....	1.32	....	602.32
Total, . .	44,605.76	230,425.65	37,362.44	979.49	101,993.99	419,047.33

* Including quarterly assessment for management expense.

† Including fees.

‡ Total includes \$2,800 of money borrowed.

§ Total includes \$880 of money borrowed.

|| Including \$5 for pass books.

CASH DISBURSEMENTS LAST FISCAL YEAR.

ASSOCIATION.	Real Estate Loans.	Share Loans.	With- drawals.	Expense Account.	Balance on Hand.	Total.
New Haven Co-op.,	\$ 8,100.00	\$ 1,775.00	\$ 23,678.93	\$ 617.88	\$ 3,440.65	\$ 37,612.46
New Britain, . .	13,400.00	200.00	15,810.03	500.34	5,022.24	34,932.61
Meriden First Mut.,	17,275.00	....	2,513.99	439.25	1,763.27	21,991.51
Meriden Second Mut.	15,750.00	....	1,649.27	506.41	1,069.82	18,975.50
Meriden Permanent,	8,322.68	8,513.28	*11,875.62	573.70	2,213.22	31,498.50
Bridgeport, . .	19,800.00	3,564.10	16,184.17	318.62	6,311.94	46,178.83
Hartford, . . .	25,350.00	9,827.54	9,561.83	†1,081.49	5,098.28	50,919.14
Middletown, . .	18,150.00	3,150.00	5,028.69	391.85	6,671.22	33,391.76
Shelton, . . .	2,850.00	250.00	1,939.61	143.61	1,617.00	†8,800.22
Norwalk, . . .	8,900.00	1,700.00	23,354.44	122.10	5,474.40	39,550.94
Rockville, . .	21,800.00	1,750.00	5,911.72	277.15	1,991.47	31,730.34
New Haven, . .	13,900.00	665.00	5,056.57	500.67	391.40	\$23,313.64
New Haven Prog.,	6,100.00	878.00	2,901.69	240.34	477.34	||10,677.37
Willimantic, . .	9,100.00	....	2,235.96	71.30	3,582.34	14,989.60
Manchestsr, . .	4,150.00	525.00	6,341.43	57.75	2,908.41	13,882.59
Stamford Co-op.,	....	....	....	†250.18	352.14	602.32
Total, . . .	192,947.68	32,797.92	134,043.95	6,092.64	48,285.14	419,047.33

The net gains of the associations from the business of the last fiscal year were about \$38,000, or just about the amount of receipts from interest and premiums, the receipts from fines and fees and the gains by withdrawals meeting the expense of management. These gains and their sources for each association, are here stated:

* Including \$360.68 stock retired by the board.

† Including \$93.64 permanent expense.

‡ Total includes \$2,000, borrowed money repaid.

§ Total includes \$2,800, borrowed money repaid.

|| Total includes \$80, borrowed money repaid.

¶ Permanent expense.

GAINS LAST FISCAL YEAR.

ASSOCIATION.	Undivid- ed Profit from Old Ac- count.	Interest and Pre- miums Received.	Fines and Fees Re- ceived.	By With- drawals.	Total Gross.	Net (Ex- pense of Manage- ment De- ducted.)
New Haven Co-op.,	\$ 8.07	\$ 2,424.94	\$	\$	\$2,433.01	\$ 1,815.13
New Britain, . .	....	3,889.99	129.52	873.01	4,892.52	4,507.30
Meriden First Mut.,	1.33	1,446.04	14.95	22.41	1,484.73	1,078.81
Meriden Second Mut.	....	954.28	426.25	....	1,380.53	989.12
Meriden Permanent,	143.12	2,563.40	198.46	....	2,904.98	2,331.28
Bridgeport, . .	295.38	5,270.51	225.61	673.04	*6,491.54	6,172.92
Hartford, . . .	....	†4,230.46	187.13	230.48	4,648.07	3,660.22
Middletown, . .	2.95	3,353.79	710.97	228.32	4,296.03	3,955.71
Shelton. . . .	....	929.25	.50	38.65	968.40	824.79
Norwalk, . . .	186.48	†4,096.62	144.61	\$	4,427.71	4,305.61
Rockville, . . .	....	†3,807.18	71.53	.68	3,879.39	3,751.17
New Haven, . . .	....	1,031.71	177.94	67.64	1,277.29	918.82
New Haven Prog.,	3.03	703.04	131.53	57.77	895.37	750.39
Willimantic, . .	19.05	1,163.83	57.75	\$	1,240.63	1,184.33
Manchester, . . .	....	1,587.67	32.90	99.03	1,719.60	1,661.85
Stamford Co-op., .	....	....	40.32	....	40.32	40.32
Total, . . .	659.41	37,452.71	2,549.97	2,291.03	42,980.12	37,947.77

OVER SEVEN HUNDRED HOMES.

The foregoing tables show the financial status of the associations. Now as to their work as a whole. During their existence they have made over 1,800 loans, 704 of which were to pay for homes, the majority of which would probably not have been obtained were it not for the aid and incentive of the associations. Over 600 of these loans to pay for homes were made within the last six years, an average of 100 homes per year secured through the co-operation of the members of these 16 associations. The number and purpose of loans are thus stated by years:

* Total includes \$27.00 insurance repaid.

† Including \$155.74 interest on deposits.

‡ Excluding interest received in advance.

§ Not obtainable.

NUMBER AND PURPOSE OF LOANS, ALL ASSOCIATIONS.

YEAR.	NUMBER OF LOANS.	
	To Pay for Homes.	For Other Purposes.
1883,	4	8
1884,	9	13
1885,	12	16
1886,	9	15
1887,	17	44
1888,	30	38
1889,	50	50
1890,	72	95
1891,	139	145
1892,	151	219
1893,	152	352
*1894,	59	157
Total,	704	1,150

There were advanced on these mortgage loans, during the existence of the associations \$961,412, to which should be added an amount estimated at about \$16,000, representing loans in the early years of one association of which accurate record could not be obtained. Only two of the more than 700 securities taken have been defaulted, these two within the past two years. The loss thereby is infinitesimal. In addition there were loaned on stock security \$119,205, and \$378,789 were paid to withdrawing members; the total of investments and repayments on stock being nearly one million and a half of dollars. The investments represent about three times the amount of withdrawals. The increase of investments by years appears in the subjoined table:

* The decreased amounts for this year are explained by the fact that all the associations are not included, the last fiscal year reported for several associations not embracing any part of the calendar year 1894.

INVESTMENTS AND LOSSES, ALL ASSOCIATIONS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.	DEFAULTED SECURITIES.		
				Number.	Amount.	Losses Thereby.
1883, . .	\$ 1,505.00	\$ 7,400.00	\$ 3,740.00	..	....	....
1884, . .	3,795.31	10,800.00	986.00	..	....	....
1885, . .	3,289.40	14,450.00	1,745.00	..	....	....
1886, . .	7,758.26	8,950.00	1,195.00	..	....	....
1887, . .	7,648.70	19,970.00	7,060.00	..	....	....
1888, . .	14,857.87	41,749.50	8,775.00	..	....	....
1889, . .	23,313.46	65,036.70	4,627.55	..	....	....
1890, . .	28,999.11	113,134.90	6,321.71	..	....	....
1891, . .	44,234.42	155,015.00	10,795.34	..	....	....
1892, . .	65,128.56	206,206.40	25,262.01	..	....	....
1893, . .	88,099.07	233,537.15	32,804.97	1	\$5,342.26	....
*1894, . .	90,159.73	85,162.80	15,893.28	1	1,050.00	\$30.00
Total,	378,788.89	961,412.45	119,205.86	2	6,392.26	30.00

The increase in the amount of shares withdrawn in 1893 and in 1894 is very striking, particularly so for 1894, as, owing to the fact that the fiscal year of some of the associations corresponds with the calendar year, the figures given for 1894 do not include all the withdrawals for that calendar year. During the business depression immediate cash was of more importance to many members than future gain. That the associations were able to meet the unusual drain upon them is good evidence of their stability.

About twenty-eight per cent. of the amount loaned on mortgages has been repaid, and over seventy-six per cent. of the amount loaned on stock. Loans of the latter class are generally to meet temporary emergencies. They largely increased, in number and in amount, in the last two years. The number and amount of loans repaid by associations are :

* The decreased amounts for this year are explained by the fact that all the associations are not included, the last fiscal year reported for several associations not embracing any part of the calendar year 1894.

LOANS REPAID.

ASSOCIATION.*	Number Repaid.	AMOUNT REPAID.		
		Mortgage Loans.	Stock Loans.	Total.
New Haven Co-operative, . . .	308	\$ 69,100.00	\$ 37,666.00	\$106,766.00
New Britain,	72	31,185.85	6,255.00	37,440.85
Meriden First Mutual, . . .	5	†24,786.68	....	24,786.68
Meriden Second Mutual, . . .	4	†24,118.95	....	24,118.95
Meriden Permanent,	255	11,170.90	18,398.23	29,569.13
Bridgeport,	94	30,375.00	5,464.10	35,839.10
Hartford,	214	34,047.38	14,730.09	48,777.47
Middletown,	47	12,650.00	4,350.00	17,000.00
Shelton,	2	6,000.00	....	6,000.00
Norwalk,	31	20,000.00	800.00	20,800.00
Rockville,	7	800.00	775.00	1,375.00
New Haven,	21	4,350.00	1,364.00	5,714.00
New Haven Progressive, . . .	16	400.00	928.00	1,328.00
Willimantic,	2	4,500.00	....	4,500.00
Total,	1,078	273,284.76	90,730.42	364,015.18

One difference in the system of operations is shown by the permanency of the loans in the First and Second Mutual associations of Meriden, in which the amounts repaid represent largely repayments on existing loans. They make no stock loans, and though they have been in existence longer than several other of the associations, the number of their loans repaid and discharged is comparatively small. In the number of loans repaid the New Haven Co-operative association leads, naturally because of its longer life. It is followed closely by the Meriden Permanent and the Hartford associations, but the bulk of the repayments in the Meriden Permanent has been of stock loans, that association filling largely for its members the position of a savings bank.

* No loans repaid in Manchester and Stamford associations.

† Including periodical repayments on loans.

BUREAU OF LABOR STATISTICS.

The number and amount of loans outstanding at the end of the last fiscal year follows, with a statement of the guarantee fund, which, with one or two exceptions, is merely a balance of profits after division :

LOANS OUTSTANDING AT END OF LAST FISCAL YEAR.

ASSOCIATION.	MORTGAGE LOANS.		STOCK LOANS.		Guarantee Fund.
	Number.	Amount.	Number.	Amount.	
New Haven Co-operative,	37	\$ 46,400.00	14	\$ 3,475.00	....
New Britain,	61	75,514.15	6	625.00	\$ 193.63
Meriden First Mutual,	61	58,185.82	....	....	700.00
Meriden Second Mutual,	58	58,261.05	....	....	....
Meriden Permanent,	46	49,242.24	51	3,918.24	....
Bridgeport,	49	79,175.00	38	4,625.00	500.39
Hartford,	34	56,144.87	75	7,370.60	1,311.73
Middletown,	46	51,400.00	19	3,450.00	....
Shelton,	6	9,900.00	1	250.00	....
Norwalk,	53	61,400.00	6	2,100.00	369.82
Rockville,	40	71,700.00	11	1,275.00	....
New Haven,	15	27,400.00	8	265.00	13.64
New Haven Progressive,	9	11,600.00	6	565.00	....
Willimantic,	9	20,800.00	....	....	....
Manchester,	15	27,400.00	5	525.00	....
Total,	539	704,523.13	238	28,443.84	3,089.21

The amount of loans outstanding, plus the amount repaid, should balance the total of all investments made. That it does not balance, is explained by the fact that the early records of a few of the associations are not complete. The number of loans balances.

The table following gives the number of shares of stock in existence at the end of the last fiscal year, and their prospective value at maturity. If none of the existing shares should be withdrawn, and no more stock should be issued, the stock now outstanding would promise a saving, within a few years, of something over four millions of dollars.

SHARES OUTSTANDING AT END OF LAST FISCAL YEAR.

ASSOCIATIONS.	Total Number.	Value at Maturity.
New Haven Co-operative,	1,230	\$ 246,000.00
New Britain,	1,767	353,400.00
Meriden First Mutual,	600	300,000.00
Meriden Second Mutual,	1,256	314,000.00
Meriden Permanent,	865	216,250.00
Bridgeport,	2,203	440,600.00
Hartford,	1,941	485,250.00
Middletown,	1,542	308,400.00
Shelton,	204	40,800.00
Norwalk,	3,812	381,200.00
Rockville,	1,812	362,400.00
New Haven,	910	182,000.00
New Haven Progressive,	548	109,600.00
Willimantic,	537	137,400.00
Manchester,	940	189,800.00
Stamford Co-operative,	167	41,750.00
Total,	20,493	4,108,850.00

ONE MATURED SERIES.

Only one series of stock in any of the existing associations has reached maturity. That was the first series of the New Haven Co-operative Savings Fund and Loan Association. It was issued July 18, 1881, and matured June 28, 1894, since the date of the statistical report to this Bureau. The time of maturity was 155 $\frac{1}{3}$ months. Of the 475 shares issued in this series, only twenty-five were outstanding at the date of maturity, and of the 101 shareholders in the series, only seven remained to the end. Of these seven three drew the \$200 per share to which they were entitled, the other four leaving the money in the hands of the association at four per cent. interest.

VARIATIONS IN METHODS OF OPERATION.

The Connecticut associations differ in methods, sometimes radically. Two of the associations are terminating, the others being

serial or continuous. The terminating associations are the First and Second Meriden Mutual Benefit Building and Loan Associations. In the language of the by-laws, each of these terminating associations "shall continue until each member has had the loan due on his share, and has received back the money subscribed for such share, less any working expenses that may be due." A novel feature of these associations is that loans are made alternately by lot and sale, and the member awarded a loan by lot may transfer it or place it in the hands of the directors for sale, in which event he is entitled to any subsequent loan coming due by sale. A member who has obtained a loan on any share is excluded from any farther loan upon such share, and in the Meriden Second those receiving a free loan may not share in the profit from premiums. There is no interest charge for loans in either association, aside from the premiums (money not being loaned on stock), and repayment of loans is made weekly, in the first Meriden 10 per cent. per year of the sum advanced, and in the Second Meriden at the rate of \$2 per week on each \$1,000 advanced, and pro rata on the premium. In each association a member holding a mortgage loan may turn over the real estate security to the association, being obligated for any balance of assessments not met by the income from rent of the property. In the Meriden Second, when payments on shares are in arrears for two years, the amount paid in, less working expenses, is returned at the rate at which it was paid into the association weekly. In both associations shares may be withdrawn at their full value after three years. The shares are not cancelled, however, but are held to be sold to new members.

PREMIUM ADDED TO THE LOAN.

Another somewhat peculiar association is the Meriden Permanent, in which association the premium is added to the loan (there being no interest charge on mortgage loans), and the whole is repaid in weekly installments of one five-hundredth part. In default of six consecutive weekly payments on a loan the balance is payable on demand. In addition to real estate, stock of other Meriden savings and loan associations, or bonds of the United States, of the State of Connecticut or of the city of Meriden, are taken as security. Loans on stock are payable in as many equal installments as the borrower may elect, not to exceed 500. Unpledged shares may be withdrawn

at any time, the amount paid being the full value up to the beginning of the six months' term in which the application for withdrawal is made.

WITHDRAWAL PROVISIONS.

The withdrawal provisions in the other associations are: Full value at any time—New Haven Co-operative, Shelton, Willimantic, Stamford; all profits less one-half of the preceding six months earnings—Manchester, Rockville; during the first year no profit, during the second year fifty per cent. of the profit, and thereafter eighty per cent.—Bridgeport; during the first two years no profit, during the third year fifty per cent., during the fourth year seventy-five per cent., during the fifth year eighty-seven and one-half per cent., thereafter all the profit—Middletown; during the first year no profit, during the second year fifty per cent., during the third year eighty per cent., and thereafter all—New Haven; during the first year fifty per cent., during the third and fourth years seventy-five per cent., during the fourth, fifth, sixth and seventh years ninety per cent., and thereafter all—New Haven Progressive; withdrawal at any time, with three-quarters of the earnings—New Britain; withdrawal not permitted during first six months, during second six months subscriptions only, during second and third years subscriptions with five per cent. interest, and thereafter a larger percentage of the earnings—Hartford.

POWER TO RETIRE UNPLEDGED SHARES.

Power to compel the retirement of unpledged shares is possessed by the New Haven Co-operative, the Meriden Permanent, the Bridgeport, the Hartford, the Middletown, the Norwalk, the New Haven, the New Haven Progressive, the Willimantic and the New Britain associations, while in the Rockville and Manchester associations stockholders may be forced to borrow, with the privilege of withdrawing.

FORECLOSURE PROCEEDINGS.

Foreclosure proceedings are in order, after six months default, in the New Haven Co-operative, the Shelton, the Norwalk, the New Haven Progressive, the Willimantic, the Manchester and the Rockville associations, and after three months in the Bridgeport, the

New Haven and the Stamford associations. In this connection this unique provision from the by-laws of the New Haven Progressive association may be quoted :

“The Board shall have power, on receiving a written application from any member, who from want of employment, temporary embarrassment, or from any other cause, shall be unable to continue the subscriptions, to grant a suspension of payments for a limited period. The member shall be allowed to continue his subscriptions as if no such suspension had taken place, or he shall pay up the arrears as the Board of Management may determine.”

THE INTEREST REBATE PLAN.

The practice of crediting upon a loan the payments made in dues, when they amount to the maturing value of a share of stock, thereby reducing the interest and premium charges, is followed by the New Haven Co-operative and the Stamford associations. The Hartford association permits the repayment of a loan at any time, either wholly or in part, correspondingly reducing interest and premium charges when the repayment amounts to the maturing value of a share, and reducing interest, though not premium, when the repayments amount to one-half or one-quarter of the maturing value of a share. In the New Haven, the Bridgeport, the Willimantic, the New Haven Progressive and the Norwalk associations, a borrower may repay at any time an amount equal to the maturing value of one or more shares, and thus obtain a reduction of interest charges.

None of the associations take money on deposit, though several of them borrow money in order to accommodate those desiring loans, and the Shelton association is authorized by its charter to borrow up to a certain percentage of its assets.

PAID UP STOCK.

A by-law of the Stamford association makes it discretionary with the Board of Management whether or not to accept the offer of a member to pay in the full face value of his shares. In the event of acceptance, the holder of the paid-up shares will be required to pay the regular dues, and will receive in cash any dividends declared thereon. Under one plan the Hartford association sells shares of the face value of \$250 for \$225, credits the stock with dividends at the rate of three per cent. semi-annually, and permits the holder to

draw semi-annual dividends in cash equal to five per cent. per annum, the balance of earnings remaining to mature stock.

The financial officers of each association are required to give bonds. It is also provided in the rules of the New Haven Progressive and the Stamford associations that no two persons who are related by the ties of blood or marriage, or who are associated in business, shall be eligible to offices of trust at the same time.

Some other features of management have been grouped in the three following tables :

STOCK-HOLDING PROVISIONS.

ASSOCIATION.	How Often Series are Issued.	Maturing Value per Share.	SHARE LIMIT OF INDIVIDUAL HOLDING PER SERIES.		
			Pledged.	Unpledged.	Both.
New Haven Co-operative,	Annually,	\$200.00	*25	*25	*25
New Britain, . . .	Semi-annually,	200.00	*15	*15	*15
Meriden First Mutual, .	Not Serial,	500.00	12	12	12
Meriden Second Mutual,	" "	250.00	24	24	24
Meriden Permanent. .	Semi-annually,	250.00	25	25	25
Bridgeport, . . .	" "	200.00	80	15	45
Hartford, . . .	† Semi-annually,	250.00	25	25	25
Middletown, . . .	Semi-annually,	200.00	*25	*25	*25
Shelton, . . .	Annually,	200.00	*25	*25	*25
Norwalk, . . .	Not Serial,	100.00	50	25	50
Rockville, . . .	Annually,	200.00	‡....	25	‡....
New Haven, . . .	Semi-annually,	200.00	25	25	25
New Haven Progressive,	At any time,	200.00	*20	15	*20
Willimantic, . . .	Not Serial,	200.00	25	25	25
Manchester, . . .	Semi-annually,	200.00	25	25	25
Stamford Co-operative,	Not Serial,	250.00	40	40	40

* In all series.

† Will be quarterly hereafter.

‡ Unlimited.

RATE OF FEES AND DUES.

ASSOCIATION.	Membership Fee.	Dues per Share.	Transfer Fee.	Withdrawal Fee.
New Haven Co-op.,	None.	\$1.00 monthly.	None.	None.
New Britain, . .	"	1.00 "	.25 cents.	"
Meriden First Mut.,	.25 per share.	.25 weekly.	.50 "	"
Meriden Second Mut.	.50 cents.	.12½ "	.50 "	"
Meriden Permanent.	.15 per share.	.25 "	.25 "	"
Bridgeport, . .	.25 "	1.00 monthly.	.25 "	"
Hartford, . .	None.	.25 weekly.	.25 "	"
Middletown, . .	"	1.00 monthly.	.25 "	"
Shelton, . . .	.50 cents.	1.00 "	.25 "	"
Norwalk, . . .	None.	.50 "	\$1.00	"
Rockville, . .	"	1.00 "	.10 per share.	"
New Haven, . .	.25 per share.	1.00 "	.25 cents.	*.10 per share.
New Haven Prog.,	.25 "	1.00 "	.25 "	None.
Willimantic, . .	.25 "	1.00 "	.25 "	"
Manchester, . .	None.	1.00 "	.10 per share.	"
Stamford Co-op., .	\$1.00	.25 weekly.	\$1.00	"

In a large majority of the associations the dues are one dollar monthly, which aids to simplicity in accounts. Where the dues are paid weekly the amount is a divisor of one dollar.

There is little, or no obstruction in the way of fees to the withdrawal of an investment. Only one of the associations charges a withdrawal fee, and then only on shares less than three years old.

INTEREST AND FINES.

Six per cent. is the rate of interest in the majority of the associations, both on mortgage and on stock loans, only a few having reduced the rate to five per cent. Of course, the premium rate added increases the actual interest rate. Premium rates for each association are given in succeeding pages.

The fines for arrears of payments, as appears from the succeeding table, are not excessive, nor on the tontine plan, while being large enough to insure reasonable promptness.

* On shares less than three years from date of issue.

INTEREST RATES AND FINES.

ASSOCIATION.	ANNUAL INTEREST RATE.		Fines on Arrears of Payments.
	On Mortgage.	On Stock Loans.	
New Haven Co-operative, .	6	6	2 per cent. per month.
New Britain,	*5	*5	2 " "
Meriden First Mutual, . .	† ..	..	5 cents each arrear.
Meriden Second Mutual, . .	† ..	..	2½ cents per share.
Meriden Permanent, . . .	† ..	6	2 to 4 cents per share.
Bridgeport,	6	6	5 per cent. per month.
Hartford,	6	6	2 cents per share per week.
Middletown,	6	6	2 per cent. per month.
Shelton,	6	6	2 cents per share per month.
Norwalk,	6	6	5 per cent. per month.
Rockville,	6	6	2 " "
New Haven,	5	5	3 " "
New Haven Progressive, . .	5	5	3 " "
Willimantic,	6	6	2 " "
Manchester,	6	6	2 " "
Stamford Co-operative, . .	5	5	6 " "

MANAGEMENT EXPENSE.

The expense of management is generally met from the general receipts, but the First and Second Meriden associations and the Middletown association have a special management fund, the last named association including in that fund all the receipts from fines. The Hartford association, on one class of stock, had been in the habit of charging an entrance fee of \$2, which was devoted to expense, and which was not to be returned to the investor. It is understood, however, that, by a modification of the rule, everything paid into the association hereafter, is for the benefit of the investor. The annual salaries paid by the several associations have been thus tabulated :

* Plus a premium bid.

† Premium, instead of interest.

ANNUAL SALARIES PAID.

ASSOCIATION.	Secretary.	Treasurer.	President.	Vice-President.	First Trustee.
New Haven Co-operative, .	\$350.00	\$	\$	\$	\$
New Britain,	180.00	....	....	....	....
Meriden First Mutual, .	200.00	50.00	....	....	....
Meriden Second Mutual, .	225 00	50.00	....	....	....
Meriden Permanent, . .	300.00	35.00	15.00	5.00	15.00
Bridgeport,	200.00	....	....	....	....
Hartford,	*	50.00	50.00	....	....
Middletown,	200.00	50.00	....	....	..
Shelton,	50.00	....	....	....	....
Norwalk,	†100.00	....	....	....	....
Rockville,	50.00	....	....	....	....
New Haven,	†185.00	....	....	....	....
New Haven Progressive, .	60.00	....	....	....	....
Willimantic,	\$50.00	....	....	....	....
Manchester,	50.00	....	....	....	....
Stamford Co-operative, .	....	....	....	....	....

As a rule, only the offices of secretary and treasurer are salaried, though two associations pay small amounts to the president, and one association also recompenses in a very moderate degree the vice-president and the first trustee. Only five of the associations pay the treasurer, the salary in no case being higher than \$50, and in one association being as low as \$35 annually. Salaries paid secretaries vary from \$50 annually to \$350, or to the uncertain, but probably much larger amount to be paid the secretary of the Hartford association, who gives his whole time to the duties of the office, and receives annually as compensation one per cent. of the average assets. The bookkeeping in these associations is intricate, and it does not appear that the secretaries are over-paid. The services they render, largely gratuitously, would command very much higher compensation elsewhere.

The per cent. of management expense, as figured in this report, is the ratio of running expense to the receipts from dues, interest,

* One per cent. of average assets.

† Since 1891.

‡ To financial secretary, \$150; to recording secretary, \$35.

§ Beginning in 1893.

premiums and fines, the receipts from fees being omitted, as that is an irregular source of income. The per cent. is given first of each association by years, followed by the aggregate for all the associations by years. It will be observed that, grouping all the associations, the expense of management during their existence has been less than two per cent.

The variation by years, in expense of management for all associations, was from 3.54 per cent. to 1.64 per cent. The variation as between the different associations was much larger—from 5.10 per cent. in the first year of one association, when the expense would naturally be high, to four one-hundredths of one per cent. in another association in a year during which no salaries were paid. As a rule, the smaller the association the less the expense ratio.

PER CENT. EXPENSE OF MANAGEMENT.

ASSOCIATIONS.	1883	1884	1885	1886	1887	1888
New Haven Co-operative, . . .	2.11	1.69	1.89	1.87	2.33	3.12
New Britain, . . . . .	....	....	....	....	2.53	1.36
Meriden First Mutual. . . . .	....	....	....	....	....	3.12

ASSOCIATIONS.	1889	1890	1891	1892	1893	1894
New Haven Co-operative, . . .	4.05	3.91	3.60	3.63	1.94	3.02
New Britain,	1.57	1.69	1.54	1.33	1.26	1.25
Meriden First Mutual,	3.04	3.04	2.80	3.09	4.77	....
Meriden Second Mutual,	3.76	4.14	3.11	3.22	3.78	....
Meriden Permanent, . . . . .	....	....	....	3.61	2.80	3.93
Bridgeport,	2.49	1.13	1.06	.85	.93	....
Hartford,	5.10	3.80	3.06	2.26	3.33	....
Middletown, . . . . .	....	2.86	1.76	1.72	1.49	1.52
Shelton,	1.21	3.36	3.36	3.15	4.36	....
Norwalk, . . . . .	....	.78	.07	.47	.50	.49
Rockville, . . . . .	....	.79	.54	.56	.47	....
New Haven, . . . . .	....	....	2.53	1.97	2.49	2.30
New Haven Progressive, . . . .	....	....	2.64	2.10	2.01	....
Willimantic, . . . . .	....	....	....	.69	.04	.54
Manchester, . . . . .	....	....	....	.48	.51	.42

RATIO EXPENSE TO RECEIPTS, ALL ASSOCIATIONS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
*1883,	\$ 12,637.47	\$ 266.75	2.11
1884,	11,336.20	192.00	1.69
1885,	14,869.72	281.78	1.89
1886,	15,357.77	286.50	1.87
1887,	21,550.52	758.09	3.52
1888,	35,208.53	1,247.69	3.54
1889,	73,049.66	2,254.06	3.09
1890,	119,013.50	2,765.86	2.32
1891,	†178,743.58	†3,325.66	1.86
1892,	232,789.03	3,843.96	1.65
1893,	260,373.74	4,427.34	1.70
†1894,	139,683.23	2,291.75	1.64
Total,	1,114,612.95	21,941.44	1.97

RATIO OF BORROWERS TO SHAREHOLDERS.

It has been said regarding savings and loan associations elsewhere, that the ratio of borrowers to shareholders was about one to four. That ratio is closely approached in the Connecticut associations, the exact percentage for all associations being 22.03. It varies widely, however, as between the associations, the range being from 9 to 39 per cent. In the following table which presents these percentages, the number of shareholders represents the number who have been members during the life of each association, and the number of borrowers represents the number who contracted loans during that time, the fact that many of them borrowed more than once not being considered in this connection :

* For one association (the New Haven Co-operative) from date of organization in July, 1881, to March, 1883.

† Including Shelton for 1890.

‡ The decreased amounts for this year are explained by the fact that all the associations are not included, the last fiscal year reported for several associations not embracing any part of the calendar year 1894.

PER CENT. BORROWERS OF SHAREHOLDERS.

ASSOCIATIONS.	Number of Share- holders.	Number of Borrowers.	Per Cent. Borrowers of Share- holders.
New Haven Co-operative,	985	166	16.85
New Britain,	734	117	15.94
Meriden First Mutual,	251	66	26.29
Meriden Second Mutual,	296	62	20.81
Meriden Permanent,	261	103	39.46
Bridgeport,	449	153	34.06
Hartford,	668	210	31.44
Middletown,	272	65	23.90
Shelton,	33	9	27.27
Norwalk,	447	67	14.99
Rockville,	285	53	18.60
New Haven,	221	37	16.74
New Haven Progressive,	153	28	18.30
Willimantic,	124	11	8.87
Manchester,	116	20	17.24
Total,	5,297	1,167	22.03

The highest percentage of borrowers of shareholders is found in the Meriden Permanent association, due largely, as explained heretofore, to the large number of stock loans made in that association. Next in the amount of percentage of borrowers is the Bridgeport association, followed in the order named, by the Hartford, the Shelton and the Meriden First associations. The lowest ratio is found in the Willimantic association. The comparatively low percentages in the Meriden Mutual associations, in which each member must, at some time or another, be a borrower, is explained by the fact that in these associations no loans are made on stock. In total number of shareholders since organization, the New Haven Co-operative, the New Britain and the Hartford associations stand at the head, the combined number in the three associations named being nearly one-half of the total in all associations. The smallest association in the State is the one in Shelton.

In the succeeding table the number of shareholders contains some duplications of individuals, as several hold shares in more than one series. They are counted as shareholders, however, in each

series, as separate accounts are kept with them for each series. The number of loans exceeds the number of individual borrowers, as many borrowed more than once. In this table the per cent. of loans to shareholders rises to over twenty-eight. It also appears from the table that about one share in six of the total number of shares issued has been pledged for loans.

PER CENT. PLEDGED SHARES OF TOTAL, AND LOANS OF
SHAREHOLDERS, ALL ISSUES.

ASSOCIATION.	Number of Shares Issued.	Number of Shares Pledged.	Per Cent. Pledged Shares of Total.	Number of Share- Holders.	Number of Loans.	Per Cent. Loans of Share- hold- ers.
New Haven Co-operative,	6,157	552	8.97	1,026	359	34.99
New Britain,	5,243	576	10.99	978	139	14.21
Meriden First Mutual, .	607	144	23.72	251	66	26.29
Meriden Second Mutual, .	1,374	100	21.83	298	72	20.81
Meriden Permanent, . .	1,459	342	23.44	465	352	75.70
Bridgeport,	3,715	607	16.34	828	179	21.62
Hartford,	3,136	1,197	38.17	764	323	42.28
Middletown,	2,094	381	18.19	333	112	33.63
Shelton,	566	88	15.55	33	9	27.27
Norwalk,	6,859	845	12.32	509	89	17.49
Rockville,	2,235	386 $\frac{3}{4}$	17.30	327	58	17.74
New Haven,	1,551	170	10.96	258	44	17.05
New Haven Progressive, .	879	154	17.52	165	31	18.79
Willimantic,	992	135	13.61	124	11	8.87
Manchester,	1,467	157	10.70	138	20	14.49
Stamford Co-operative, .	167	....	....	30	....	....
Total,	38,501	6,034 $\frac{3}{4}$	15.67	6,536	1,854	28.37

The number of shares issued, compared with the total membership, shows an average of about seven shares for each member; while the number of shares pledged for loans, compared with the number of borrowers, shows an average of about five shares pledged for each loan. The largest ratio of shares issued to members is in the Shelton association, where it is 17. The next highest is in the Norwalk association, where it is 15. In the Manchester association the ratio is 12. In no other association is it higher than eight.

Percentages similar to the preceding, but calculated for each series of stock in the serial associations, are given in the two tables which follow. It is notable that in two associations—the Shelton and the New Haven Progressive—the entire issue of stock in two series was pledged for loans. Aside from these exceptional cases, the highest ratio of shares pledged to shares issued (over an extended number of series) is found in the Hartford association. In the Manchester association nearly 92 per cent. of the shares issued in one series were pledged for loans.

PER CENT. PLEDGED SHARES OF TOTAL, BY SERIES.

ASSOCIATION.*	SERIES.									
	1	2	3	4	5	6	7	8	9	10
New Haven Co-op.	7.79	....	19.42	18.33	13.15	9.97	16.90	13.90	7.87	5.12
New Britain, .	....	....	....	12.88	4.07	14.83	9.19	10.58	8.61	12.46
Meriden Perman't,	21.58	26.59	28.16	23.91	29.38	23.75	16.44	9.89	....	....
Bridgeport, .	16.46	15.80	11.49	22.06	7.57	4.70	18.62	36.49	14.84	25.20
Hartford, .	51.49	48.61	61.25	33.14	27.72	37.95	36.13	22.69	29.04	31.21
Middletown, .	27.34	5.58	11.62	14.38	39.70	10.96	21.86	19.63	9.54	15.12
Shelton, .	13.41	....	100.00	100.00	....	....	....	....	....	....
Rockville, .	5.83	22.67	55.31	30.96	....	....	....	....	....	....
New Haven, .	7.00	11.43	3.92	7.87	30.91	6.20	44.70	....	....	....
New Haven Prog.,	25.09	50.00	....	....	....	....	....	35.71	....	100.00
Manchester, .	9.29	10.66	91.67	10.29	....	....	....	....	....	....

ASSOCIATION.	SERIES.									
	11	12	13	14	15	16	17	18	19	20
New Haven Co-op.	7.57	4.36	9.28	5.41	....	....	....	....	....	....
New Britain, .	7.47	10.95	16.20	18.32	16.38	33.01	....	....	....	....
New Haven Prog.,	....	16.67	....	20.83	....	....	....	61.54	23.08	100.00

ASSOCIATION.	SERIES.					
	23	27	28	30	31	32
New Haven Prog.,	13.70	9.09	50.00	21.43	33.33	33.33

* Associations not serial omitted.

PER CENT. LOANS OF SHAREHOLDERS, BY SERIES.*

ASSOCIATION.†	SERIES									
	1	2	3	4	5	6	7	8	9	10
New Haven Co-op.,	2.97	....	39.13	31.88	26.21	32.79	100.00	62.90	41.43	58.57
New Britain, .	....	....	....	14.29	9.28	34.21	58.00	6.41	8.47	9.09
Meriden Perman't,	83.51	94.23	89.09	70.73	84.31	46.15	22.22	14.29	....	....
Bridgeport, .	1.81	7.76	12.04	20.24	19.35	22.39	47.54	50.00	49.09	82.14
Hartford, .	55.17	70.59	85.71	56.82	37.04	32.00	25.00	21.84	26.37	21.13
Middletown, .	37.33	23.33	24.24	25.00	55.17	42.11	31.43	34.62	26.32	43.75
Shelton, .	19.23	....	100.00	100.00	....	....	....	....	....	....
Rockville. .	16.67	21.13	17.39	16.95	....	....	....	....	....	....
New Haven, .	18.37	8.70	29.03	11.11	27.27	8.70	30.77	....	....	....
New Haven Prog.,	29.79	50.00	....	....	....	....	....	25.00	....	100.00
Manchester. .	12.90	21.05	66.67	11.11	....	....	....	....	....	....

ASSOCIATION.	SERIES.									
	11	12	13	14	15	16	17	18	19	20
New Haven Co-op.,	31.07	32.94	52.24	20.00	....	....	....	....	....	....
New Britain, .	14.47	13.85	25.76	21.74	17.95	28.57	....	....	....	....
New Haven Prog.,	....	16.67	....	25.00	....	....	...	50.00	66.67	100.00

ASSOCIATION.	SERIES.					
	23	27	28	30	31	32
New Haven Prog.,	8.33	25.00	50.00	16.67	100.00	50.00

The total number of shareholders at the end of the last fiscal year for each association lacked only twelve of being 3,000, which number has presumably been increased at the date of the issuance of this report. A little over three-fourths of the members are men, about one-fifth women and one-eighteenth minors. Women are

* In some instances the number of loans per series exceeded the number of shareholders. The explanation is that several shareholders borrowed more than once.

† Associations not serial omitted.

found in the membership in each association, and in fourteen of the sixteen associations minors are saving money. The number of men, women and minors in each association appears in the table which follows :

SHAREHOLDERS AT END OF LAST FISCAL YEAR.

ASSOCIATION.	Men.	Women.	Minors.	Total.
New Haven Co-operative,	126	34	11	171
New Britain,	220	42	....	262
Meriden First Mutual,	212	37	2	251
Meriden Second Mutual,	184	35	1	220
Meriden Permanent,	159	48	14	221
Bridgeport,	161	78	31	270
Hartford,	289	54	6	349
Middletown,	210	38	24	272
Shelton,	29	4	....	33
Norwalk,	128	52	24	204
Rockville,	185	83	17	285
New Haven,	91	16	14	121
New Haven Progressive,	59	16	5	80
Willimantic,	72	10	12	94
Manchester,	89	20	7	116
Stamford,	37	1	1	39
Total,	2,251	568	169	2,988

In the Rockville, Bridgeport and Norwalk associations women constitute more than one-quarter of the membership. The smallest proportion of women is in the Stamford association, which, being the latest of the associations to organize, has done little business as yet.

The largest proportion of minors is found in the Willimantic, the Norwalk, the New Haven and the Bridgeport associations. Strangely enough, there are no minors among the large membership of the New Britain association. Shelton is another association without minors. The Meriden First Mutual has two, and the Meriden Second Mutual and the Stamford associations one each.

The largest association, in the point of existing membership, is the Hartford, with a total of 349 members. Rockville is next with 285, followed closely, in the order named, by the Middletown, the

Bridgeport, the New Britain and the Meriden First Mutual associations. In the number of men in the membership, the Hartford association is first, followed by the New Britain, the Meriden First Mutual and the Middletown associations.

All told, there were at the end of the fiscal year 2,251 men, 568 women and 169 minors interested in the aggregate assets of the sixteen local building and loan associations in Connecticut. The percentage of men, women and minors in each association is here given:

**SHAREHOLDERS AT END OF LAST FISCAL YEAR BY
PERCENTAGES.**

ASSOCIATION.	Men.	Women.	Minors.
New Haven Co-operative,	73.69	19.88	6.43
New Britain,	83.97	16.03	....
Meriden First Mutual,	84.46	14.74	.80
Meriden Second Mutual,	83.64	15.91	.45
Meriden Permanent,	71.95	21.72	6.33
Bridgeport,	59.63	28.89	11.48
Hartford,	82.81	15.47	1.72
Middletown,	77.21	13.97	8.82
Shelton,	87.88	12.12	....
Norwalk,	62.75	25.49	11.76
Rockville,	64.91	29.12	5.97
New Haven,	75.21	13.22	11.57
New Haven Progressive,	73.75	20.00	6.25
Willimantic,	76.59	10.64	12.77
Manchester,	76.72	17.24	6.04
Stamford,	94.88	2.56	2.56
Aggregates,	75.33	19.01	5.66

The men have been further classified in successive tables, as to occupation, by which it appears that over 54 per cent. of them are mechanics, 31 per cent. are in business (which classification includes those in clerical employment) and 9 per cent. are laborers. Eighty per cent. at least, of the men are wage earners. The highest per cent. of skilled workers in the membership is found in Meriden and New Britain, and the highest per cent. of laborers in Manchester, Rockville and Middletown.

As saving and loan associations are only to be found in centers of population, it is not surprising that the number of farmers in the membership should be so small. Professional men also constitute a small proportion of the membership. For them the opportunities for investment are more numerous.

The bulk of the membership is composed of skilled mechanics, of men in business in a small way, of clerks and of laborers. The skilled mechanics naturally predominate, as they have generally a surplus of earnings which may be saved.

In only three of the associations do the men in business or in the professions exceed the number of skilled mechanics and of laborers. Strangely enough, there is in the association in Willimantic—a distinctively manufacturing town—the largest percentage of men in business or in clerical employment, and a comparatively small percentage of mechanics. It is curious also that the percentage of skilled mechanics should be the lowest in the association in Rockville—another distinctively manufacturing city.

OCCUPATION OF ADULT MALE SHAREHOLDERS.

ASSOCIATION.	In the Pro- fessions.	In Business.	Me- chanics.	Laborers.	Farmers.
New Haven Co-operative, .	6	51	62	7	....
New Britain,	1	50	168	....	1
Meriden First Mutual, .	5	31	169	2	5
Meriden Second Mutual, .	2	29	149	2	2
Meriden Permanent, . .	8	42	98	9	2
Bridgeport.	8	40	89	23	1
Hartford,	1	106	155	25	2
Middletown,	8	78	72	53	1
Shelton,	2	10	12	2	3
Norwalk,	8	65	55	2	....
Rockville,	7	82	43	49	4
New Haven,	11	42	96	2	....
New Haven Progressive, .	4	9	41	5	....
Willimantic,	3	41	25	1	2
Manchester,	3	26	33	25	2
Stamford,	2	8	26	1	....
Total,	75	710	1233	208	25

OCCUPATION OF ADULT MALE SHAREHOLDERS, BY PERCENTAGES.

ASSOCIATION.	In the Pro- fessions.	In Business.	Me- chanics.	Laborers.	Farmers.
New Haven Co-operative, .	4.76	40.48	49.21	5.55	....
New Britain, . . . .	.45	22.73	76.37	....	.45
Meriden First Mutual, .	2.36	14.62	79.72	.94	2.36
Meriden Second Mutual. .	1.09	15.76	80.97	1.09	1.09
Meriden Permanent, . .	5.03	26.41	61.64	5.66	1.26
Bridgeport,	4.97	24.84	55.28	14.29	.62
Hartford, . . . .	.35	36.68	53.63	8.65	.69
Middletown,	2.86	37.14	34.28	25.24	.48
Shelton,	6.90	34.48	41.38	6.90	10.34
Norwalk,	4.69	50.78	42.97	1.56	....
Rockville,	3.78	44.32	23.25	26.49	2.16
New Haven,	12.09	46.15	39.56	2.20	....
New Haven Progressive, .	6.78	15.25	69.49	8.48	....
Willimantic,	4.17	56.94	34.72	1.39	2.78
Manchester,	3.37	29.21	37.08	28.09	2.25
Stamford,	5.41	21.62	70.27	2.70	....
Aggregate,	3.33	31.54	54.78	9.24	1.11

Interesting facts and figures concerning each association, which could not conveniently be grouped, appear in successive pages.

THE NEW HAVEN CO-OPERATIVE SAVINGS FUND AND LOAN.

The New Haven Co-operative is first in chronological order. Its charter is, in many respects, a model one, notably in its limitation of the premium bid, which must not exceed one-quarter of one per cent. per month. Mortgages on real estate must not exceed sixty per cent. of the ascertained value. In addition to real estate security, pledge may be made, at par, of bonds of the United States, of any of the New England States, of New York State, or of any city or town in Connecticut, or of the stock of any national bank in Connecticut. The corporation is empowered to purchase any real estate on which it may have a mortgage, judgment or lien, or in which it may have an interest, but it must sell the property within five years from the date of purchase. Another notable charter pro-

THE NEW HAVEN CO-OPERATIVE.—CONTINUED.

vision is that no series of stock, issued after the date of a loss, shall participate in or contribute to such loss. The charter further provides that the corporation shall be examined by the Bank Commissioners in the same manner and be subject to the same regulations as are by law provided in the case of savings banks; shall make annual returns to the Bank Commissioners and to the State Comptroller, and shall be subject to taxation as is provided in the case of savings banks. Statistics of this association follow:

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value per Share.	Gain per Share.			
1	July 18, 1881	475	25	\$196.38	\$45.38	101	3	37
2	March, 1882	239	15	183.83	39.83	55	0	0
3	Sept., 1882	103	5	174.61	37.61	23	9	20
4	March, 1883	800	23	165.29	33.29	69	22	55
5	" 1884	502	33	147.16	27.16	103	27	66
6	" 1885	321	11	129.72	21.72	61	20	32
7	" 1886	284	23	112.95	16.95	47	52	48
8	" 1887	482	32	96.82	12.82	62	39	67
9	" 1888	508	50	81.31	9.31	70	29	40
10	" 1889	488	52	66.40	6.40	70	41	25
11	" 1890	581	105	52.06	4.06	103	32	44
12	" 1891	527	121	38.27	2.27	85	28	23
13	" 1892	571	181	25.01	1.01	67	35	53
14	" 1893	776	554	12.26	.26	110	22	42

Only the first two loans of this association were sold at a premium, and the amounts or rate paid could not be obtained. Premiums, when bid, are to be paid monthly.

THE NEW HAVEN CO-OPERATIVE.—CONTINUED.

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1882, . . . .	....	....	....	....	....	....
1883,	\$ 382.07	....	*\$12,218.00	....	\$37.40	....
1884,	723.08	....	10,608.00	....	5.12	....
1885,	1,208.16	....	13,660.00	....	1.56	....
1886,	1,526.61	....	13,831.00	....	.16	....
1887,	1,875.78	....	13,593.00	....	....	....
1888,	2,105.67	....	14,347.00	....	....	....
1889,	2,272.08	....	14,781.00	....	....	....
1890,	2,160.60	....	14,888.00	....	....	....
1891,	2,143.34	....	16,974.00	....	....	....
1892,	2,146.71	....	16,407.00	....	....	....
1893,	2,272.32	....	17,634.00	....	....	....
1894,	2,424.94	....	18,048.00	....	....	....

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
*1883,	\$ 12,637.47	\$ 266.75	2.11
1884,	11,336.20	192.00	1.69
1885,	14,869.72	281.78	1.89
1886,	15,357.77	286.50	1.87
1887,	15,468.78	359.92	2.33
1888,	16,452.67	513.90	3.12
1889,	17,053.08	691.08	4.05
1890,	17,048.60	666.70	3.91
1891,	19,117.34	688.80	3.60
1892,	18,553.71	673.70	3.63
1893,	19,906.32	386.52	1.94
1894,	20,472.94	617.88	3.02
Total,	198,274.60	5,625.53	2.84

* From July, 1881, to March, 1883.

THE NEW HAVEN CO-OPERATIVE.—CONTINUED.

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1883,	\$ 1,505.00	\$ 7,400.00	\$ 3,740.00
1884,	3,795.31	10,800.00	986.00
1885,	3,289.40	14,450.00	1,745.00
1886,	7,758.26	8,950.00	1,195.00
1887,	7,510.25	9,400.00	6,960.00
1888,	13,969.36	14,150.00	8,250.00
1889,	15,085.26	11,900.00	2,595.00
1890,	18,529.03	4,900.00	2,460.00
1891,	13,874.76	10,000.00	3,445.00
1892,	17,657.82	5,050.00	6,175.00
1893,	12,946.34	10,400.00	1,815.00
1894,	23,678.93	8,100.00	1,775.00
Total,	139,599.72	115,500.00	41,141.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1883,	4	6	\$3,000.00	\$500.00	\$1,850.00	\$2,500.00	\$50.00	\$748.00
1884,	9	13	1,800.00	600.00	1,080.00	200.00	20.00	75.00
1885,	12	16	2,500.00	100.00	1,204.00	370.00	15.00	109.00
1886,	9	15	3,000.00	300.00	994.00	150.00	25.00	79.00
1887,	7	41	1,800.00	200.00	1,175.00	1,000.00	5.00	174.00
1888,	6	31	3,000.00	200.00	1,088.00	5,000.00	10.00	343.00
1889,	7	24	3,000.00	200.00	1,322.00	1,500.00	20.00	117.00
1890,	5	36	1,300.00	400.00	816.00	200.00	10.00	70.00
1891,	7	26	1,800.00	75.00	833.00	2,000.00	25.00	164.00
1892,	4	24	1,800.00	250.00	721.00	4,000.00	20.00	294.00
1893,	9	26	2,000.00	200.00	866.00	300.00	15.00	79.00
1894,	6	16	1,800.00	500.00	1,157.00	300.00	25.00	118.00
Total No. Loans.	85	274						

THE NEW BRITAIN CO-OPERATIVE SAVINGS AND LOAN.

The figures for the New Britain association—the second to be organized—are :

SHARE ACCOUNT.

Series	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value Per Share.	Gain Per Share.			
1	April, 1886	392	90	\$121.74	\$25.74	79	..	..
2	Oct., 1886	248	48	112.74	22.74	43	..	..
3	April, 1887	183	17	103.71	19.71	46	8*	26*
4	Oct., 1887	264	77	94.86	16.86	56	8	34
5	April, 1888	467	36	86.25	14.25	97	9	19
6	Oct., 1888	209	52	77.90	11.90	88	13	31
7	April, 1889	272	66	69.78	9.78	50	14	25
8	Oct., 1889	397	79	61.87	7.87	78	5	42
9	April, 1890	302	74	54.21	6.21	59	5	26
10	Oct., 1890	329	117	46.74	4.74	66	6	41
11	April, 1891	509	199	39.47	3.47	76	11	38
12	Oct., 1891	333	119	32.39	2.39	65	9	37
13	April, 1892	395	170	25.53	1.53	66	17	64
14	Oct., 1892	262	127	18.87	.87	46	10	48
15	April, 1893	470	256	12.40	.40	78	14	77
16	Oct., 1893	206	180	6.11	.11	35	10	68

It is a peculiarity of the New Britain association that bids for loans must be in sums of five cents, or its multiple, per share per month, and that stock loans, as well as real estate loans, are sold at a premium. Interest and premiums are payable monthly in advance. In the first of the three tables following, the interest, dues and fines are given, in the second the premium rate paid on mortgage loans, and in the third the rate paid on stock loans.

* Sum of three series.

THE NEW BRITAIN CO-OPERATIVE.—CONTINUED.

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.*	Amount Received.	Amount in Arrears.
1887,	\$ 162.25	\$	\$ 5,881.00	....	\$ 18.34	\$
1888,	789.42	....	9,919.00	....	39.61	....
1889,	1,241.85	....	14,786.00	....	72.79	....
1890,	1,687.93	....	16,108.00	....	64.18	....
1891,	2,149.18	53.84	17,972.00	....	73.82	7.78
1892,	2,676.42	229.82	21,143.00	....	101.77	24.60
1893,	3,316.15	293.80	23,263.00	....	99.63	37.12
1894,	3,476.51	604.59	23,022.01	....	128.27	77.64

PREMIUMS.—ON MORTGAGE LOANS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1887,	\$ 20.15	\$ ....	.05	.05	.05
1888,	81.83	....	.25	.05	.095
1889,	133.32	....	.50	.05	.1625
1890,	308.12	....	.55	.05	.1875
1891,	221.85	2.94	.55	.05	.23
1892,	324.81	19.65	.30	.05	.1214
1893,	388.51	36.60	.15	.05	.0857
1894,	413.48	77.14	.20	.05	.10

ON STOCK LOANS.

1887, . . . . .	.15	.05	.0833
1888, . . . . .	.35	.05	.1143
1889, . . . . .	.35	.05	.1159
1890,	1.00	.05	.3450
1891, . . . . .	.70	.05	.2642
1892, . . . . .	.60	.05	.1833
1893, . . . . .	.20	.05	.095
1894, . . . . .	.20	.20	.20

* Not considered an asset and not reported.

THE NEW BRITAIN CO-OPERATIVE.—CONTINUED.

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1887,	\$ 6,081.74	\$ 153.69	2.53
1888,	10,829.86	147.77	1.36
1889,	16,233.96	255.08	1.57
1890,	18,168.23	306.89	1.69
1891,	20,416.85	313.90	1.54
1892,	24,246.00	322.52	1.33
1893,	27,067.29	340.38	1.26
1894,	27,040.27	339.26	1.25
Total,	150,084.20	2,179.49	1.45

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1887,	\$ 138.45	\$ 5,000.00	\$ 100.00
1888,	888.51	9,600.00	525.00
1889,	7,671.20	9,100.00	1,850.00
1890,	7,510.36	12,800.00	600.00
1891,	10,941.24	15,150.00	515.00
1892,	12,011.61	18,300.00	1,750.00
1893,	10,946.55	23,350.00	1,340.00
1894,	15,800.17	13,400.00	200.00
Total,	65,908.09	106,700.00	6,880.00

In this New Britain association the loans on stock constitute only a very small proportion of the total amount loaned. Even during the period of industrial depression, the stock loans decreased, when they might have been expected to increase. The effect of the depression is shown, however, in the increase of the amount paid on shares withdrawn.

The average of the yearly amounts loaned on mortgage shows a steadily increasing ratio, which may be accepted as evidence of an improved quality of the homes built or purchased.

THE NEW BRITAIN CO-OPERATIVE.—CONCLUDED.

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1887, . .	5	?	\$2,000.00	\$1,000.00	\$1,000.00	\$ 50.00	\$ 50.00	\$ 33.33
1888, . .	10	7	2,400.00	300.00	960.00	200.00	50.00	75.00
1889, . .	8	19	1,800.00	600.00	1,137.50	300.00	25.00	97.37
1890, . .	4	8	3,600.00	1,000.00	3,200.00	300.00	50.00	100.00
1891, . .	10	7	2,600.00	400.00	1,515.00	200.00	40.00	73.57
1892, . .	14	12	2,000.00	300.00	1,307.00	600.00	40.00	145.83
1893, . .	14	10	2,400.00	100.00	1,639.00	150.00	30.00	134.00
1894, . .	7	3	3,600.00	200.00	1,914.00	75.00	50.00	66.67
Total No. of Loans,	72	67						

THE FIRST MERIDEN MUTUAL BENEFIT BUILDING AND LOAN.

The statistical tables for the First Meriden Mutual are short, as compared with those of some of the other associations, for the reason that it does not issue stock in series, has no interest charge (other than premium) and makes no loans on stocks. The holding value per share and the gain per share could only be figured on one of the first shares issued. As each share, however, dates from the beginning of the association, the value given may be applied to each of the existing shares. Withdrawals not being permitted during the first three years of the association, the statement of amount paid on shares withdrawn begins with 1890. All the loans made by this association are to pay for homes, and in no case was the amount loaned less than \$1,000.

SHARE ACCOUNT.

DATE OF ISSUE.	Shares Issued.	AT END LAST FISCAL YEAR.			Total Number of Shareholders.	Total Number of Loans.	Total Number of Shares Pledged for Loans.
		Shares Outstanding.	Holding Value Per Share.	Gain Per Share.			
April, 1887	607	690	* \$93.00	* \$5.00	251	86	144

* An original share.

BUREAU OF LABOR STATISTICS.
THE FIRST MERIDEN MUTUAL.—CONTINUED.
DUES AND FINES.

FISCAL YEAR.	DUES.		FINES.	
	Amount Received.	Amount in Arrears.*	Amount Received.	Amount in Arrears.*
1887, . . .	\$ 5,963.10	.....	\$11.05	.....
1888, . . .	7,766.10	.....	16.10	.....
1889, . . .	6,552.85	.....	9.85	.....
1890, . . .	7,285.41	.....	18.45	.....
1891, . . .	8,386.15	.....	21.70	.....
1892, . . .	8,180.92	.....	38.20	.....
1893, . . .	7,109.19	.....	14.95	.....

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PER CENT. PAID.		
			Highest.	Lowest.	Average.
1887, . . .	\$....	....	....	....	....
1888, . . .	143.80	....	5.75	4.125	4.94
1889, . . .	296.18	....	5.20	3.50	4.35
1890, . . .	489.10	....	6.00	2.50	4.25
1891, . . .	636.48	....	4.25	2.75	3.50
1892, . . .	768.41	....	5.50	2.00	3.75
1893, . . .	1,377.32	....	4.50	2.50	3.50

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines, and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1887,	\$	\$ 244.48	....
1888,	7,926.00	247.52	3.12
1889,	6,858.68	208.66	3.04
1890,	7,792.96	236.56	3.04
1891,	9,038.33	252.84	2.80
1892,	8,987.53	277.95	3.09
1893,	8,501.46	405.92	4.77
Total, , . . .	49,104.96	1,873.93	3.32

* Not stated.

**THE FIRST MERIDEN MUTUAL.—CONCLUDED.
INVESTMENTS.**

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.
1887,	\$	\$ 5,570.00
1888, . . . . .	.....	9,205.00
1889, . . . . .	.....	14,600.00
1890,	870.00	10,372.50
1891,	1,438.20	11,960.00
1892,	1,438.28	12,512.50
1893,	2,513.99	18,752.50
Total,	6,260.47	82,972.50

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.		
	To Pay for Homes.	For other Purposes.	Largest.	Smallest.	Average.
1887,	5	....	\$1,330.00	\$1,000.00	\$1,115.00
1888,	8	....	1,390.00	1,000.00	1,150.00
1889,	13	....	2,115.00	1,000.00	1,123.00
1890,	8	....	2,077.50	1,000.00	1,296.00
1891,	9	....	2,025.00	1,000.00	1,329.00
1892,	9	....	2,185.00	1,000.00	1,390.00
1893,	14	....	2,220.00	1,000.00	1,339.00
Total No. Loans,	66				

THE SECOND MERIDEN MUTUAL BENEFIT BUILDING AND LOAN.

The Second Meriden Mutual is another association, which is not serial, and which does not make stock loans.

SHARE ACCOUNT.

SHARES ISSUED.	AT END LAST FISCAL YEAR.			Total No. of Share- holders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
	Shares Out- standing.	Holding Value Per Share.	Gain Per Share.			
1374	1256	* \$41.26¼	* \$2.76¼	298	62	300

* An original share.

THE SECOND MERIDEN MUTUAL—CONTINUED.

INTEREST AND DUES.

FISCAL YEAR.	INTEREST.		DUES.	
	Amount Received.	Amount in Arrears.*	Amount Received.	Amount in Arrears.*
1888, . . . .	\$ .....	.....	\$ 7,563.00	.....
1889,	34.30	.....	7,757.18	.....
1890,	91.89	.....	8,464.26	.....
1891,	83.21	.....	8,764.94	.....
1892,	217.50	.....	10,076.91	.....
1893,	195.12	.....	9,402.18	.....

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.*	AMOUNT PAID PER SHARE.		
			Highest.	Lowest.	Average.
1888,	\$ 48.04	....	...	....	....
1889,	244.86	....	\$100.00	\$76.27½	\$91.73
1890,	458.96	....	101.75	75.60	96.80
1891,	534.94	....	107.50	47.50	82.22
1892,	548.52	....	58.50	53.75	56.60
1893,	759.16	....	58.00	37.50	53.70

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1888, . . . .	....	\$ 336.50	....
1889,	\$ 8,036.34	302.27	3.76
1890,	9,015.11	372.82	4.14
1891,	9,383.09	292.27	3.11
1892,	10,842.93	349.54	3.22
1893,	10,356.46	391.41	3.78
Total,	47,633.93	2,046.81	3.59

* Not stated.

THE SECOND MERIDEN MUTUAL.—CONCLUDED.
INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.
1888,	\$	\$ 8,794.50
1889, . . . . .	....	9,501.00
1890, . . . . .	....	17,237.00
1891,	1,120.87	13,780.00
1892,	1,291.08	14,949.00
1893,	1,649.27	18,118.50
Total,	4,061.22	82,380.00

In this association also withdrawals were nor permitted during the first three years after organization.

All the loans of the association are to pay for homes, and with few exceptions, the smallest amount loaned is \$1,000.

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.		
	To Pay for Homes.	For Other Purposes.	Largest.	Smallest.	Average.
1888,	6	....	\$1,957.50	\$1,000.00	\$1,465.75
1889,	8	....	2,100.00	1,000.00	1,187.62
1890,	12	....	2,110.00	475.00	1,436.41
1891,	11	....	2,145.00	800.00	1,252.72
1892,	12	....	1,734.00	1,000.00	1,245.75
1893,	13	....	1,848.00	1,000.00	1,393.73
Total No. of Loans,	62				

THE MERIDEN PERMANENT BUILDING AND LOAN.

Statistical details could not be obtained from the Meriden Permanent association for the first three years of its existence, because of deficiencies in the keeping of the accounts. Even in later years the accounts lack some of the particulars common to the bookkeeping of many of the other associations. In the report as presented premiums had to be combined with interest, the premium rate could not be ascertained, and fees could not be separated from fines.

THE MERIDEN PERMANENT.—CONTINUED.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value per Share.	Gain per Share.			
1	Oct. 29, 1888	519	243	\$ 83.42	\$12.67	194	162	112
2	Sept. 1, 1890	173	103	59.40	7.15	52	49	46
3	Jan. 6, 1891	174	109	46.83	4.58	55	49	49
4	Oct. 6, 1891	138	95	35.16	2.66	41	29	33
5	April 5, 1892	211	131	27.70	1.70	51	43	62
E	Oct. 4, 1892	80	47	20.46	.96	26	12	19
7	April 4, 1893	73	54	13.42	.42	18	4	12
8	Oct. 3, 1893	91	83	6.60	.10	28	4	9

INTEREST, PREMIUMS, DUES, FEES AND FINES.

FISCAL YEAR.	INTEREST AND PREMIUMS.		DUES.		FINES AND FEES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
*1892, . . .	\$ 1,025.00	\$	\$ 8,210.32	\$ 421.08	\$ 141.54	....
1892, . . .	1,861.31	....	12,988.45	789.33	198.91	....
1894, . . .	2,537.49	244.67	11,859.10	596.59	197.63	....

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
*1892,	\$ 9,376.86	\$ 338.75	3.61
1893,	15,048.67	421.15	2.80
1894,	14,594.22	573.70	3.93
Total,	39,019.75	1,333.60	3.42

* Nine months.

THE MERIDEN PERMANENT.—CONCLUDED.
INVESTMENTS AND LOSSES.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.	DEFAULTED SECURITIES.		
				Number.	Amount.	Losses Thereby.
*1892, . .	\$ 2,441.03	\$ 12,938.75	\$ 5,118.46	....	\$....	\$ ....
1893, . .	2,914.71	19,616.15	8,716.33	....	....	....
1894, . .	11,514.94	11,462.80	8,513.28	1	1,050.00	†30.00
Total, .	16,870.68	44,017.70	22,348.07	1	1,050.00	30.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
†	25	32	\$	\$	\$	\$	\$....	\$
§1892, .	8	58	4,125.00	390.00	1,617.34	462.23	6.46	88.25
1893, .	14	100	3,437.50	313.65	1,401.15	475.00	5.00	87.16
1894, .	10	105	2,480.00	315.00	1,146.27	500.00	12.00	81.08
Total No. of Loans,	57	295						

THE BRIDGEPORT SAVINGS AND LOAN.

The Bridgeport association has the uncommon feature of dividing the premium bid into one hundred equal parts, one part of which is payable monthly with the dues and interest. This is an old idea in saving and loan associations, and is based upon the assumption that shares will mature in 100 months. This expectation is not always realized, with the result that premium payments end before the cancellation of the loan. In the Bridgeport association, as appears from the tables, loans are sometimes made without the requirement of a premium. The receipts from pre-

* Nine months.

† Legal expense.

‡ From organization to July 1, 1891.

§ Nine months.

THE BRIDGEPORT.—CONTINUED.

miums are also small, a very small ratio of the annual receipts from interest, and in some years not exceeding the receipts from the imposition of fines. These latter facts do not imply a slow-going association, the Bridgeport association, on the contrary, being active and progressive, and keeping its management expense down to a low ratio. This association holds one defaulted security, which came into its hands during the business depression, but it hopes to escape any loss thereby.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value per Share.	Gain per Share.			
1	January, 1889	656	418	\$ 70.95	\$ 10.95	166	3	108
2	July, 1889	538	277	62.68	8.68	116	9	85
3	January, 1890	470	228	54.69	6.69	108	13	54
4	July, 1890	399	227	47.08	5.08	84	17	88
5	January, 1891	300	203	39.69	3.69	93	18	30
6	July, 1891	298	128	32.54	2.54	67	15	14
7	January, 1892	290	212	25.64	1.64	61	29	54
8	July, 1892	285	222	18.94	.94	50	25	104
9	January, 1893	256	196	12.43	.43	55	27	38
10	July, 1893	127	92	6.12	.12	28	23	32

INTEREST, DUES, AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1889, . . .	\$ 321.91	....	\$10,821.50	\$.50	\$ 32.76	....
1890, . . .	1,271.83	....	20,813.50	....	25.55	....
1891, . . .	2,635.21	....	26,609.00	77.00	53.03	....
1892, . . .	3,892.53	....	29,355.00	....	75.47	....
1893, . . .	5,140.92	....	28,800.00	84.00	129.36	....

THE BRIDGEPORT.—CONTINUED.

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1889,	\$ 3.58	....	.02	0	.004
1890,	28.06	....	.25	0	.075
1891,	95.53	....	.15	0	.05
1892,	135.89	....	.07	0	.06
1893,	129.59	....	.23	0	.055

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines, and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1889,	\$ 11,179.75	\$ 277.91	2.49
1890,	22,138.94	249.51	1.13
1891,	29,392.77	311.97	1.06
1892,	33,458.89	283.30	.85
1893,	34,199.87	318.62	.93
Total,	130,370.22	1,441.31	1.11

INVESTMENTS AND LOSSES.

FISCAL YEAR.	Paid on Shares With-drawn.	Total Mortgage Loans.	Total Stock Loans.	DEFAULTED SECURITIES.		
				Number.	Amount.	Losses Thereby.
1889,	\$ 405.00	\$ 9,850.00	\$ 125.00	....	\$ ....	....
1890,	1,037.78	18,975.00	1,250.00	....	....	....
1891,	6,238.38	24,625.00	1,775.00	....	....	....
1892,	5,749.97	36,300.00	3,375.00	....	....	....
1893,	16,184.17	19,800.00	3,564.10	1	5,342.26	....
Total, . . .	29,615.30	109,550.00	10,089.10	1	5,342.26	....

THE BRIDGEPORT.—CONCLUDED.

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1889, . .	8	4	\$3,000.00	\$500.00	\$1,231.00	\$ 50.00	\$25.00	\$31.00
1890, . .	12	18	3,000.00	200.00	1,459.00	200.00	25.00	73.00
1891, . .	11	22	5,800.00	300.00	1,759.00	500.00	25.00	93.00
1892, . .	22	32	4,000.00	600.00	1,579.00	650.00	25.00	109.00
1893, . .	12	38	2,000.00	100.00	1,320.00	650.00	25.00	102.00
Total No. of Loans,	65	114						

THE HARTFORD BUILDING AND LOAN.

The Hartford association has a minimum premium bid of one cent per share per week, interest also being paid weekly. In the figures as reported premium is included with interest. The premium rate ranges from one and one-half to two cents per share. The association accepts as security United States, Connecticut or Hartford bonds.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value Per Share.	Gain Per Share.			
1	March 19, 1889	808	427	\$71.98	\$9.48	232	128	416
2	Oct. 10, 1889	216	104	62.18	7.18	68	48	105
3	January 1, 1890	80	46	58.32	6.32	21	18	49
4	July 1, 1890	169	76	50.52	4.77	44	25	56
5	January 1, 1891	101	42	42.34	3.34	27	10	28
6	July 1, 1891	332	179	34.71	2.21	75	24	126
7	January 1, 1892	238	101	27.30	1.30	48	12	86
8	July 1, 1892	357	259	20.13	.63	87	19	81
9	January 1, 1893	489	370	13.20	.20	91	24	142
10	July 1, 1893	346	337	6.50	....	71	15	108

THE HARTFORD.—CONTINUED.

INTEREST, PREMIUMS, DUES AND FINES.

FISCAL YEAR.	INTEREST AND PRE- MIUMS.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.*	Amount Received.	Amount in Arrears.*
1889, . . .	\$ 106.07	\$....	\$ 8,919.71	....	\$ 52.90	....
1890, . . .	711.57	....	15,237.95	....	108.51	....
1891, . . .	1,714.11	176.42	17,917.28	....	134.33	....
1892, . . .	3,141.22	63.82	21,951.53	....	175.33	....
1893, . . .	4,074.72	124.66	25,445.21	....	187.13	....

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1889,	\$ 9,078.68	\$ 463.37	5.10
1890,	16,058.03	610.72	3.80
1891,	19,765.72	605.57	3.06
1892,	25,268.08	571.79	2.26
1893,	29,707.06	987.85	3.33
Total,	99,877.57	3,239.30	3.24

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1889,	\$....	\$ 8,085.70	\$ 57.55
1890,	655.49	11,100.40	2,011.71
1891,	1,548.52	22,350.00	4,180.34
1892,	9,852.81	23,306.15	6,023.55
1893,	9,561.83	25,350.00	9,827.54
Total,	21,618.65	90,192.25	22,100.69

* Not considered an asset.

THE HARTFORD.—CONCLUDED.

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest.	Average.	Largest.	Smallest.	Average.
1889, . .	5	3	\$2,500.00	\$550.00	\$1,617.14	\$ 25.00	\$15.00	\$19.18
1890, . .	6	35	3,500.00	750.00	1,850.06	250.00	15.00	57.46
1891, . .	14	48	4,250.00	250.00	1,596.43	300.00	10.00	87.09
1892, . .	16	69	3,000.00	250.00	1,456.64	350.00	20.00	87.30
1893, . .	11	116	3,500.00	500.00	2,304.54	600.00	8.00	84.72
Total No. of Loans,	52	271						

THE MIDDLETOWN BUILDING AND LOAN.

In the Middletown association premiums must be in sums of five cents, or its multiple, per month, interest and premium being payable monthly in advance.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Share- hold- ers.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Out- stand- ing.	Holding Value per Share.	Gain per Share.			
1	May, 1889	384	275	\$70.76	\$12.76	75	28	105
2	Nov., 1889	197	122	62.22	10.22	30	7	11
3	March, 1890	241	161	56.68	8.68	33	8	28
4	Sept., 1890	153	126	48.61	6.61	32	8	22
5	March, 1891	164	132	40.82	4.82	29	16	65
6	Sept., 1891	146	76	33.31	3.31	19	8	16
7	March, 1892	247	209	26.09	2.09	35	11	54
8	Sept., 1892	214	144	19.15	1.15	26	9	42
9	March, 1893	262	211	12.50	.50	38	10	25
10	Sept., 1893	86	86	6.12	.12	16	7	13

THE MIDDLETOWN.—CONTINUED.

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1890,	\$ 106.00	....	\$ 4,501.00	\$	\$17.32	....
1891,	486.75	....	9,677.00	....	39.54	....
1892,	1,358.80	....	12,639.00	....	51.98	....
1893,	2,238.25	....	16,180.00	....	55.32	....
1894,	3,076.59	....	18,963.00	317.00	76.27	....

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1890,	\$ 17.90	....	.40	.05	.21
1891,	74.05	....	.50	.05	.12½
1892,	181.45	....	.25	.05	.11
1893,	242.25	....	.10	.05	.06
1894,	277.20	....	.05	.05	.05

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1890,	\$ 4,642.22	\$ 132.73	2.86
1891,	10,277.34	180.60	1.76
1892,	14,231.23	244.16	1.72
1893,	18,715.82	278.20	1.49
1894,	22,393.06	340.32	1.52
Total,	70,259.67	1,176.01	1.67

THE MIDDLETOWN.—CONCLUDED.

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1890,	\$....	\$ 4,400.00	\$....
1891,	563.66	8,150.00	650.00
1892,	1,079.03	17,450.00	1,150.00
1893,	2,934.33	15,900.00	2,850.00
1894,	5,028.69	18,150.00	3,150.00
Total,	9,605.71	64,050.00	7,800.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1890,	4	...	\$2,000.00	\$400.00	\$1,100.00	\$	\$	\$
1891,	10	7	2,000.00	200.00	815.00	150.00	50.00	92.85
1892,	20	9	1,700.00	200.00	870.00	300.00	50.00	127.75
1893,	13	16	3,000.00	200.00	1,223.00	800.00	50.00	178.00
1894,	12	21	4,800.00	300.00	1,512.50	550.00	50.00	150.00
Total No. of Loans,	59	53						

THE SHELTON LOAN AND SAVINGS.

The Shelton association makes loans on real estate up to 85 per cent. of its appraised value. The premium paid for loans is divided and made payable monthly on the proportion or basis of ten years for the maturity of the shares. This is on the presumed assumption that shares will mature in 120 months, which is about eighteen months less than the estimated time of maturity in local savings and loan associations. The premium bid is an amount per share, ranging in the life of the association from five to thirteen dollars. Dividing the amount bid by 120, and it is seen that the amount to be paid monthly is very small. Naturally, therefore, the annual receipts from this source are small. A very large majority of the

THE SHELTON.—CONTINUED.

members of the Shelton association joined the organization at its inception, and its growth in membership and in business has been comparatively slow.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value Per Share.	Gain Per Share.			
1	1889	492	167	\$63.00	\$9.00	26	5	66
2	1890	52	15	47.50	5.50	3	..	..
3	1891	16	16	32.80	2.80	2	2	16
4	1893	6	6	6.10	.10	2	2	6

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.*	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1889, . . .	\$133.91	\$	\$4,427.00	\$2.28	\$44.00	....
1890-1891, . .	872.14	....	6,876.00	1.36	32.00	....
1892, . . .	797.17	....	3,005.00	....	4.40	....
1893, . . .	878.25	72.25	2,367.00	....	.50	....

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1889,	\$ 4.26	....	\$ 5.00	\$5.00	\$5.00
1890,	69.69	....	13.10	5.00	9.00
1891,	99.25	....	13.10	5.00	9.37
1892,	87.69	....	13.10	5.00	9.37
1893,	51.00	....	10.00	5.00	7.50

* Including membership fees.

THE SHELTON.—CONCLUDED.

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1889,	\$ 4,609.17	\$ 55.69	1.21
1890-1891,	7,949.08	267.09	3.36
1892,	3,894.26	122.69	3.15
1893,	3,296.75	143.61	4.36
Total,	19,749.26	589.03	2.98

INVESTMENTS AND LOSSES.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1889,	\$ 152.00	\$2,000.00	\$....
1890, . . . . .	....	9,450.00	....
1891,	*2,694.00	1,600.00	....
1892,	1,663.00	....	....
1893,	1,939.61	2,850.00	250.00
Total,	†6,591.59	15,900.00	250.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1889,	1	....	\$2,000.00	\$2,000.00	\$2,000.00	\$....	\$....	\$....
1890,	3	....	4,000.00	2,450.00	3,150.00	....	....	....
1891,	1	....	1,600.00	1,600.00	1,600.00	....	....	....
1892,	0	....	....	....	....	....	....	....
1893,	3	1	1,650.00	200.00	950.00	250.00	250.00	250.00
Total No. of Loans.	8	1						

* Including 1890.

† Total increased by \$142.98 earnings paid on withdrawals to January 1, 1893.

THE NORWALK BUILDING, LOAN AND INVESTMENT.

In the Norwalk association the premium and interest are payable monthly.

SHARE ACCOUNT.

YEAR OF ISSUE.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Share- holders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
		Shares Outstand- ing.	Holding Value per Share.	Gain per Share.			
1890, . .	2765	1684	*\$ 34.48	*\$ 5.48	211	8	176
1891, . .	2279	1228	....	....	150	20	121
1892, . .	606	292	....	....	46	23	231
1893, . .	606	284	....	....	50	30	204
1894, . .	603	324	....	....	52	18	113

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1890, . . .	\$ 200.50	\$....	\$8,836.20	\$....	\$ 20.80	\$ 5.19
1891, . . .	1,066.50	....	20,623.62	....	50.93	10.11
1892, . . .	2,215.00	14.50	24,381.16	....	87.02	7.24
1893, . . .	3,034.00	....	21,694.53	....	83.62	....
1894, . . .	3,645.00	36.50	20,477.00	36.50	90.61	19.66

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1890,	\$ 4.01	\$....	.10	Par	.0411
1891,	120.51	....	.175	.0025	.119
1892,	393.61	4.50	.25	Par	.089
1893,	437.18	....	.14	"	.0495
1894,	477.59	7.48	.32	"	.061

* Of an original share.

THE NORWALK.—CONCLUDED.

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1890,	\$9,061.51	\$ 71.13	0.78
1891,	21,861.56	14.63	0.07
1892,	27,076.79	126.63	0.47
1893,	25,249.33	126.63	0.50
1894,	24,690.20	122.10	0.49
Total,	107,939.39	461.12	0.43

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1890,	\$ 236.45	\$ 9,500.00	\$....
1891,	3,550.57	20,200.00	....
1892,	6,617.91	22,100.00	700.00
1893,	10,089.46	20,400.00	500.00
1894,	23,354.44	9,200.00	1,700.00
Total,	43,848.83	81,400.00	2,900.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1890,	8	..	\$2,000.00	\$700.00	\$1,187.50	\$	\$	\$
1891,	20	..	2,500.00	100.00	1,010.00	....	....	....
1892,	20	8	4,000.00	200.00	1,105.00	500.00	100.00	233.33
1893,	17	3	2,500.00	200.00	1,200.00	300.00	100.00	166.66
1894,	13	5	2,000.00	100.00	708.00	1,000.00	100.00	340.00
Total No. of Loans,	78	11						

THE ROCKVILLE BUILDING AND LOAN.

The Rockville association has the distinction of having sold no loans at a premium.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value Per Share.	Gain Per Share.			
1	January, 1890	1,235	1,017	\$53.98	\$5.98	174	29	72
2	" 1891	408	318	39.36	3.36	71	15	92½
3	" 1892	160	125	25.50	1.50	23	4	88½
4	" 1893	432	352	12.37	.37	59	10	133¾

INTEREST, DUES, AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1890, . . .	\$ 426.00	\$10.00	\$14,562.00	\$332.00	\$99.90	\$10.98
1891, . . .	1,564.46	10.00	19,105.00	261.00	90.28	2.56
1892, . . .	2,510.71	.50	20,026.00	221.00	67.58	4.40
1893, . . .	3,846.68	16.50	23,260.00	99.00	55.03	.10

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1890,	\$15,087.90	\$118.80	0.79
1891,	20,759.74	121.11	0.54
1892,	22,604.29	126.82	0.56
1893,	27,161.71	128.22	0.47
Total,	85,613.64	494.95	0.58

THE ROCKVILLE.—CONCLUDED.

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1890,	\$ 160.00	\$14,400.00	\$
1891,	1,565.28	18,400.00	100.00
1892,	1,826.95	17,700.00	200.00
1893,	5,911.72	21,800.00	1,750.00
Total,	9,463.95	72,300.00	2,050.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1890,	10	..	\$2,000.00	\$400.00	\$1,440.00	\$	\$	\$
1891,	15	1	3,000.00	200.00	1,226.00	100.00	100.00	100.00
1892,	11	2	7,000.00	400.00	1,590.00	100.00	100.00	100.00
1893,	11	8	5,000.00	800.00	1,945.00	237.50	50.00	121.87
Total No. of Loans,	47	11						

THE NEW HAVEN BUILDING AND LOAN.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value per Share.	Gain per Share.			
1	November, 1890	557	296	\$45.54	\$3.54	99	18	99
2	February, 1891	105	50	41.88	2.88	23	2	12
3	November, 1891	153	62	31.34	1.34	31	9	6
4	May, 1892	178	124	24.70	.70	36	4	14
5	November, 1892	55	49	18.34	.34	11	3	17
6	May, 1893	371	222	12.12	.12	46	4	23
7	November, 1893	132	107	6.03	.03	13	4	59

THE NEW HAVEN—CONTINUED.

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1891, . . .	\$120.44	\$	\$7,029.00	\$137.00	\$27.05	\$
1892, . . .	459.01	....	9,042.00	61.00	22.33	....
1893, . . .	752.76	....	10,371.00	134.00	....	....
*1894, . . .	504.94	16.25	5,577.00	111.00	16.53	5.85

PREMIUMS

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1891, . . . . .	\$ ....	\$ ....	....	....	....
1892,	28.84	....	.1667	.1033	.1439
1893,	50.03	....	.1667	.02	.0994
*1894,	41.31	1.44	.1667	.1667	.1667

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1891,	\$ 7,176.49	\$181.74	2.53
1892,	9,552.18	187.77	1.97
1893,	11,173.79	278.46	2.49
*1894,	6,139.78	141.26	2.30
Total,	34,042.24	789.23	2.32

* Six months to May 1, 1894.

THE NEW HAVEN.—CONCLUDED.

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1891,	\$ 463.00	\$ 5,800.00	\$
1892,	1,673.33	5,200.00	285.00
1893,	4,546.29	9,150.00	1,314.00
*1894,	2,062.19	11,600.00	30.00
Total,	8,744.81	31,750.00	1,629.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1891,	3	....	\$3,000.00	\$700.00	\$1,933.33	\$....	\$....	\$....
1892,	3	5	2,800.00	1,200.00	1,733.33	75.00	30.00	57.00
1893,	7	20	3,200.00	300.00	1,307.33	125.00	25.00	65.75
*1894,	4	2	4,600.00	1,600.00	2,900.00	20.00	10.00	15.00
Total No. of Loans,	17	27						

THE NEW HAVEN PROGRESSIVE BUILDING AND LOAN.

The New Haven Progressive issues stock at more frequent periods than any other of the serial associations. It admits applicants to membership monthly, issuing such number of shares of stock as is desired. In some series of stock there are no outstanding shares, and in some other series the entire number of shares issued have been pledged for loans. This association requires the payment of premiums monthly. The statistics of the association follow :

* Six months to May 1, 1894.

THE NEW HAVEN PROGRESSIVE.—CONTINUED.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value per Share.	Gain per Share.			
1	January, 1891	275	130	\$40.12	\$4.12	47	14	69
2	February, 1891	10	5	38.86	3.86	2	1	5
3	March, 1891	20	5	37.60	3.60	3	....	....
4	April, 1891	28	15	36.38	3.38	5	....	....
5	May, 1891	3	....	....	....	1	....	....
6	June, 1891	3	....	....	....	2	....	....
7	July, 1891	21	7	32.78	2.78	7	....	....
8	August, 1891	14	14	31.62	2.62	4	1	5
9	Sept., 1891	1	1	30.46	2.46	1	....	....
10	October, 1891	6	8	29.28	2.28	1	1	6
11	Dec., 1891	9	4	26.97	1.97	2	....	....
12	January, 1892	60	24	25.82	1.82	12	2	10
13	February, 1892	32	32	24.67	1.67	6	....	....
14	March, 1892	24	14	23.53	1.53	4	1	5
15	April, 1892	5	....	....	....	1	....	....
16	May, 1892	8	....	....	....	1	....	....
17	July, 1892	17	12	19.03	1.03	4	....	....
18	August, 1892	13	8	17.92	.92	2	1	8
19	October, 1892	13	1	15.70	.70	3	2	3
20	Nov., 1892	16	15	14.62	.62	2	2	16
21	January, 1893	42	39	12.46	.46	8	....	....
22	February, 1893	23	23	11.38	.38	5	....	....
23	March, 1893	73	41	10.31	.31	12	1	10
24	April, 1893	40	35	9.26	.26	8	....	....
25	May, 1893	10	5	8.21	.21	2	....	....
26	June, 1893	14	8	7.16	.16	3	....	....
27	July, 1893	44	44	6.10	.10	4	1	4
28	August, 1893	4	4	5.07	.07	2	1	2
29	Sept., 1893	8	8	4.05	.05	2	....	....
30	October, 1893	42	42	3.03	.03	6	1	9
31	Nov., 1893	3	3	2.01	.01	1	1	1
32	Dec., 1893	3	3	1.00	....	2	1	1

THE NEW HAVEN PROGRESSIVE.—CONTINUED.

INTEREST, DUES AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1891,	\$75.31	\$....	\$3,492.00	\$74.00	\$14.33	\$12.56
1892,	255.29.	12.40	4,815.00	162.00	26.43	19.74
1893,	526.70	26.96	6,444.00	162.00	51.03	14.92

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1891,	\$23.63	\$....	.32	.23	.2867
1892,	84.20	4.66	.32	.30	.31
1893,	176.34	9.30	.36	.28	.3125

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent. Expense of Receipts.
1891,	\$3,605.27	\$95.14	2.64
1892,	5,181.01	108.84	2.10
1893,	7,198.07	144.98	2.01
Total,	15,984.35	348.96	2.18

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1891,	\$235.94	\$3,000.00	\$130.00
1892,	1,186.11	2,900.00	485.00
1893,	2,901.69	6,100.00	878.00
Total,	4,323.74	12,000.00	1,493.00

THE NEW HAVEN PROGRESSIVE.—CONCLUDED.

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1891, . .	3	2	\$1,200.00	\$800.00	\$1,000.00	\$65.00	\$65.00	\$65.00
1892, . .	3	5	1,800.00	400.00	966.66	165.00	20.00	97.00
1893, . .	4	14	3,200.00	400.00	1,525.00	125.00	20.00	62.00
Total No. of Loans.	10	21						

THE WILLIMANTIC BUILDING AND LOAN.

The Willimantic association issues stock not in series, but at any time. It had collected no fines, nor made any loan at a premium up to the date of the report to this Bureau. Neither had it made any stock loans.

SHARE ACCOUNT.

YEAR OF ISSUE.	Shares Issued.	AT END LAST FISCAL YEAR.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
		Shares Outstanding.	Holding Value per Share.	Gain per Share.			
1892, . .	645	519	\$39.34	\$3.34	71	3	40
1893, . .	116	56	25.46	1.46	17	4	50
1894, . .	231	112	12.36	.36	36	4	45

INTEREST AND DUES.

FISCAL YEAR.	INTEREST.		DUES.	
	Amount Received.	Amount in Arrears.*	Amount Received.	Amount in Arrears.*
1892,	\$ 152.50	....	\$7,073.00	....
1893,	690.25	....	7,435.00	....
1894,	1,163.83	....	9,339.34	....

*Not considered an asset.

THE WILLIMANTIC.—CONCLUDED.

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest and Dues.	Total Management Expense.	Per Cent. Expense of Receipts.
1892,	\$ 7,225.50	\$ 49.55	0.69
1893,	8,125.25	3.60	0.04
1894,	10,503.17	56.30	0.54
Total,	25,853.92	109.45	0.42

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.
1892,	\$ 97.00	\$ 6,500.00
1893,	820.80	9,700.00
1894,	2,235.96	9,100.00
Total,	3,153.76	25,300.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.		
	To Pay for Homes.	For Other Purposes.	Largest.	Smallest.	Average.
1892,	3	....	\$3,000.00	\$1,500.00	\$2,166.00
1893,	4	....	3,100.00	1,600.00	2,425.00
1894,	4	....	3,000.00	600.00	2,275.00
Total No. of Loans,	11	....		

THE MANCHESTER BUILDING AND LOAN.

Loans in the Manchester association are made to the highest bidder, and the entire amount of premiums is paid in advance. In practice the members appear not to have exceeded a uniform premium bid of one cent per share. At that rate the premium on a loan of one thousand dollars would be only twenty-five cents. As

THE MANCHESTER.—CONTINUED.

the table shows, the receipts from this source of income are very small. It also appears that several loans have been made without the requirement of a premium. A notable feature in the statistics of this association is the very low ratio of management expense to receipts, due partly to the fact that, through the liberality of an employer, the association has to pay no rent.

SHARE ACCOUNT.

Series.	Date of Issue.	Shares Issued.	At End Last Fiscal Year.			Total No. of Shareholders.	Total No. of Loans.	Total No. of Shares Pledged for Loans.
			Shares Outstanding.	Holding Value Per Share.	Gain Per Share.			
1	April, 1891	1,023	672	\$39.42	\$3.42	93	12	95
2	April, 1892	244	101	25.51	1.51	19	4	26
3	October, 1892	24	24	18.85	.85	3	2	22
4	April, 1893	136	112	12.38	.38	18	2	14
5	October, 1893	40	40	6.09	.09	5	..	..

INTEREST, DUES, AND FINES.

FISCAL YEAR.	INTEREST.		DUES.		FINES.	
	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.	Amount Received.	Amount in Arrears.
1892,	\$ 358.16	....	\$11,914.00	\$181.00	\$17.46	\$ 5.61
1893,	1,064.69	....	13,023.00	60.00	14.40	.22
1894,	1,586.39	....	12,244.00	244.00	17.92	10.20

PREMIUMS.

FISCAL YEAR.	Amount Received.	Amount in Arrears.	RATE PAID PER SHARE.		
			Highest.	Lowest.	Average.
1892,	\$.15	....	.01	.01	.01
1893, . . . . .	.48	....	.01	.01	.01
1894,	1.28	....	.01	.01	.01

THE MANCHESTER.—CONCLUDED.

RATIO EXPENSE TO RECEIPTS.

FISCAL YEAR.	Receipts from Interest, Dues, Fines and Premiums.	Total Management Expense.	Per Cent Expense of Receipts.
1892,	\$12,289.77	\$ 59.95	0.48
1893,	14,102.57	71.79	0.51
1894,	13,849.59	57.75	0.42
Total,	40,241.93	189.49	0.47

INVESTMENTS.

FISCAL YEAR.	Paid on Shares Withdrawn.	Total Mortgage Loans.	Total Stock Loans.
1892,	\$ 542.63	\$11,000.00	\$
1893,	2,238.31	12,250.00	....
1894,	6,341.43	4,150.00	525.00
Total,	9,122.37	27,400.00	525.00

PURPOSE AND SIZE OF LOANS.

FISCAL YEAR.	NUMBER OF LOANS.		MORTGAGE LOANS.			STOCK LOANS.		
	To Pay for Homes	For Other Purp's.	Largest.	Smallest	Average.	Largest.	Smallest	Average.
1892, . . .	6	..	\$2,400.00	\$ 300.00	\$1,833.00	\$	\$	\$
1893, . . .	6	..	4,000.00	1,400.00	2,042.00	....	....	....
1894, . . .	3	5	2,000.00	800.00	1,383.00	150.00	25.00	105.00
Total No. of Loans,	15	5						

The foregoing completes the consideration of the local savings and loan associations in Connecticut. In addition, there are The Co-operative Savings Society of Connecticut, and the Swedish Building Club of New Haven, facts concerning which are given in succeeding pages.

THE CO-OPERATIVE SAVINGS SOCIETY OF CONNECTICUT.

The Co-operative Savings Society of Connecticut is chartered to operate in any State. Differing in that and other respects from the local associations, the facts concerning it are given separate treatment.

This society was chartered at the 1893 session of the General Assembly, and began business in July of that year. Its principal office is located in Hartford. The objects of the corporation, as specified in the resolution of incorporation, are the same as those of an ordinary savings and loan association. Its loans shall be made to shareholders only, except that surplus funds not required for advances to shareholders may be invested as savings bank funds are invested. It is also empowered to borrow money for the purpose of making loans, not to exceed, however, twenty per cent. of its accumulated capital.

CLASSES OF STOCK.

It is specified in the by-laws that "the stock of the society shall consist of 20,000 shares of the maturity value of \$200 each, and shall be divided into classes to be severally known as A, C, E, F, G, H and J, and such other classes as the board of directors may, from time to time, prescribe. Shares shall be issued in monthly series." Class A stock is similar to the stock in an ordinary savings and loan association. The payments are one dollar per month per share. From the profits credited to this stock there is deducted annually .72 of one per cent. of the par value of each share, to be turned into the expense fund. Holders of unpledged shares in this class may withdraw after one year, and receive the amount paid in on their stock. If they withdraw after three years they receive, in addition to the amount paid in, dividends thereon not exceeding the rate of five per cent. per annum for the average time of the investment, less a withdrawal fee of \$2 per share.

Payments on each share in Class C are made at the rate of "not less than one dollar per month," the meaning of which is, of course, that larger monthly payments than one dollar may be made. In this class interest not to exceed five per cent. per annum is allowed on all sums standing to the credit of the stockholder for six months or more, which interest may be drawn in cash semi-annually. Any excess of earnings over dividends in this class is added to the expense fund. "Shareholders of this class may withdraw the full

amount paid on their stock, together with any dividends remaining to their credit, upon demand, by giving the required notice."

A SAVINGS BANK FEATURE.

Class C might be called the savings bank feature of the plan. It is stated in the schedule furnished to an agent of the Bureau by an officer of the society that the corporation takes money on deposit at five per cent. interest; and in a circular letter issued by the society, it is announced that "persons desiring to save, with the privilege of withdrawing at any time, as under the ordinary savings bank system, will, until further notice, be allowed five per cent. interest on all sums standing to their credit for six months or more." Payments on each share in this class, the by-laws say, shall be made "until maturity thereof." It is apparent that if the dividends declared are withdrawn the stock can never mature, as excess of earnings over the declared dividends is added to the expense fund. It is also announced in the circular letter above referred to that "after having made four payments, you can take a certificate of deposit for the full amount paid, on which you may draw five per cent. interest per annum until the expiration of one hundred months from date of issue of the original certificate, when the whole principal sum may be withdrawn."

Payments on each share in Class E are to be at the rate of 50 cents per month; on each share in Class F at the rate of not less than $83\frac{1}{3}$ cents per month; and on each share in Class G at the rate of not less than $73\frac{1}{3}$ cents per month. Stock in Classes E, F and G is subject to the same withdrawal provisions as stock in Class A. From the profits earned in Class E .36 of one per cent. per annum of the par value of each share is deducted and added to the expense fund. The part, if any, which stock in Classes F and G contributes to the expense fund is not stated in the by-laws. To quote again from the circular letter:

"To investors, the society offers its seven per cent. coupon stock, with dividends payable semi-annually. Par value of each share, \$200; purchase price, \$100 per share and a premium of two per cent. thereon. This stock will mature when the dividends (if not drawn), added to the purchase price, amount to \$200 per share. Issue limited to \$100,000.

"It also offers a six per cent. coupon stock, each share being of the par value of \$200 (purchase price being \$100 and a premium of two per cent.), on which the excess earnings over the six per cent. paid are credited to the stock until it matures, when the par value will be paid in cash. Issue limited to \$100,000.

"Coupon certificates can be converted into cash at any time after one year, on notice of not to exceed sixty days."

The seven per cent. coupon stock is Class H, and the six per cent. coupon stock is Class J. On each a payment of \$100 per share is made at time of subscription, after which such stock is not liable to assessment. The two per cent. premium paid at time of purchase is added to the expense fund, as also annually .72 of one per cent. of the par value of each share in each class, to be deducted from earnings in excess of dividends. All membership fees, according to the by-laws, are also to be added to the expense fund—the schedule declares that no entrance fee is now charged—"and such other amounts as may be agreed and provided by terms of subscription to other classes of stock hereafter issued." There is no limit to individual share holding.

"No shareholder shall receive any portion of the membership fee, withdrawal fee or premium paid at the time of subscription, nor of the expense or contingent funds, upon the maturity, withdrawal or cancellation of his shares.

"If at the end of any fiscal year there remains a balance in the expense fund, after paying the legitimate expenses of the business, such balance may be transferred to the credit of the loan fund, or to the contingent fund, or a portion to each, as may be determined by the directors."

The society loans money to its shareholders to the amount of sixty-six and two-thirds per cent. of the appraised value of the real estate offered for security. Money is also loaned on stock security, the loan limit being eighty per cent. of the amount paid on the stock. Six months arrears in payments on the latter class of loans forfeits the stock pledged. Three months default in payments on a real estate loan involves foreclosure proceedings. The interest on loans is at the rate of four and eight-tenths per cent. per annum, and to this is added a premium of like annual rate. Both interest and premiums are payable monthly.

SOME STATISTICS OF THE SOCIETY.

At the end of the first six months of business no money had been loaned on stock. The mortgage loans existing at that time were twelve, the largest being for \$8,500 and the smallest for \$400, the average being \$2,666.66. The number of shares of stock then outstanding was 5,365, the par value of which is \$1,073,000. Twenty dollars had been paid on withdrawn shares. The earnings for six months, according to the society's statement, were 6.23 per cent.

Included in the earnings were \$437.71 from interest, a like amount from premiums, and \$300 from fines. At the end of the first year of business—July 14, 1894—the “earnings apportioned to full participating shares” were reported to be 11.6 per cent. The assets and liabilities at that date were :

ASSETS.	LIABILITIES.
Loans on bond, mortgage, society's stock, etc., . . \$180,369.47	Due shareholders, . . . \$174,475.15
Stock owned, 9,500.00	Balance due on uncompleted loans, 22,100.00
Cash on hand and in Trust Co. 6,705.68	Total, 196,575.15
Total, 196,575.15	

The total of assets six months previously was \$45,271.70. The loans had grown, in six months, from \$32,000 to \$180,369, and the amount due shareholders (the capital, or share account) from \$41,899 to \$174,475.

HOW EXPENSES ARE PAID.

The expense of management for the year was not learned. As reported for six months it was \$603.35. This needs explanation. The amount given is the limit of the expense fund, according to the by-laws. As the salary of the treasurer is at the rate of \$2,000 per year and that of the attorney at the rate of \$500 per year, and as there is additional expense for the main office and for the agency department, it follows that the actual expense was largely in excess of the sum which the by-laws annually assign for that purpose. This excess of expense is assumed by another corporation, known as The Co-operative Investment Co. The latter company—a joint stock association—was organized August 31, 1893, with a capital stock of \$15,000, divided into 150 shares of the par value of \$100 each. Twenty per cent. was paid in, the balance to be paid in installments as called for by the directors. The object of the company, as stated in the articles of association, “is to promote, in all proper ways, the success of The Co-operative Savings Society of Connecticut, and to that end said corporation may make such contracts with said society, looking to the furnishing of funds for its purposes as may be proper under the charter of said society and the laws of this State.” The security for the money advanced is not stated. The stockholders in The Co-operative Investment Com-

pany—or, at least, the majority of them—are also stockholders in The Co-operative Savings Society.

Regarding legislation, the treasurer of the Savings Society suggests that laws should be enacted, placing all associations of this character, or loan associations of any description in charge of the Bank, or other Commissioners, who should compel a strict observance by all associations of all laws governing banks, or other institutions loaning money; also that restrictive laws should be enacted to prevent foreign associations from coming into Connecticut and doing an illegitimate business.

THE SWEDISH BUILDING CORPORATION OF NEW HAVEN.

Somewhat akin to a savings and loan association, though more of the nature of the early English building clubs, is The Swedish Building Corporation of New Haven. It was organized July 17, 1889. According to the articles of association, the corporation shall at no time consist of more than 15 members. In operation, membership is limited to those of Swedish extraction.

The object of the corporation is "to procure real estate for its members, either by purchasing land and building thereon, or by buying houses already built." The funds, which are not to exceed \$45,000 are raised by an initiation fee of \$5, by monthly assessments of \$5, and by the income of the real estate which may become the property of the corporation. After a member has paid \$3,000 into the fund in monthly installments he is not obligated to pay more. A fine of one dollar is imposed for neglecting to pay an assessment for two consecutive months, which fine, however, may be remitted by a majority vote of the members of the corporation. For a six months unexplained default in payment of assessments the penalty is expulsion from membership and forfeiture of all interest and claim in the property of the corporation.

A member who desires to withdraw may sell his interest to any party acceptable to the corporation. If the corporation refuse to accept the proposed member, it shall be obligated to pay to the withdrawing member a sum equal to the assessments paid by him. In the event of the death of a member, his executor or administrator shall have the privilege of continuing the payment of the monthly assessments. If he shall prefer to dispose of the interest of the deceased, he shall first give the corporation the privilege of purchasing the same at its full value. If the corporation shall refuse to

purchase, then the administrator or executor shall have the right to sell the interest to any party acceptable to the corporation. Failing in this, the corporation, within three months, must pay to the representative of the deceased member a sum equal to the assessments paid by him, with the accumulated interest thereon.

The meetings of the corporation are held at the residences of the members, its officers serve without compensation, and its management expenses are simply the fees for deeds and the recording of the same, which expense is more than offset by the interest accruing from the deposit in a savings bank of the monthly assessments, pending the accumulation of the amount necessary to purchase or build.

HOW HOMES ARE PROVIDED.

When the accumulated fund is large enough to warrant the purchase of a building lot, the location of the lot, the price to be paid for the same and the member to occupy the house to be built thereon, are decided by vote of the corporation. The lot having been purchased, the member chosen to occupy the house selects the building plan, which must also be approved by the corporation. Then the house is built, the balance of the funds necessary for its erection being secured from a savings bank or other money-lending institution. The member occupying the house must pay to the corporation, in addition to the regular monthly assessment, eight per cent. interest on the amount invested in the property by the corporation, as also the interest on the mortgage, the taxes, insurance, etc. Title to the property is to remain vested in the corporation until the entire number of 15 houses have been built or bought, and \$3,000 paid on each, when deeds in fee simple are to be given to the occupants.

The corporation appears to be prosperous. Five houses have been built by it, each at a cost of from three to four thousand dollars. Each house is of two tenements, the extra tenement in most cases, being rented to a member of the corporation. Thus far no difficulty has been experienced in selecting house occupants or beneficiaries of the building plan.

ADVANTAGES OF LOCAL SAVINGS AND LOAN ASSOCIATIONS.

Not what is earned, but what is saved is largely the measure of the wage-earner's material advancement. "It is self-help that makes the man, and man-making is the aim which the Almighty has

everywhere impressed upon creation. It is thrift by which self-help for the masses, dependent upon labor, is principally made effective. In them thrift is the symbol and the instrument of independence and liberty, indispensable conditions of all permanent good." So spoke Gladstone in a phonographic message to a New York meeting, called in the Spring of 1889 to advance the cause of self-help and thrift, and the quoted words sound well as a text for a short chapter on the manifest advantages of savings and loan associations.

TEACH THRIFT AND STIMULATE SAVING.

Such associations teach thrift, by pointing the way to men of small means to acquire a home. They stimulate saving, the habit of which may be acquired, as well as the habit of spending. Of course, without the existence of such associations, the opportunity exists for the safe investment, in the savings banks, of surplus earnings, and the ultimate acquirement of the best and safest investment for a man of limited capital—a house and lot, a home. The provident embrace this opportunity. But there is a large class in whom the spirit of saving needs to be planted and fostered, and for whom enforced economy must take the place of neglected opportunity.

The savings bank invites savings. The saving and loan association enforces savings. The average depositor in a savings bank deposits the surplus remaining after supplying his wants and gratifying his desires. If he is indebted to the bank for a loan, he is too often content to pay the periodical interest, and is perpetually postponing the evil day when the loan is to become due, or else paying no attention to the principal if there is no limit on the mortgage. On the other hand, the member of a saving and loan association obligates himself to pay a certain sum weekly or monthly, as the case may be. The pride of keeping the self-respect of fellow members is an incentive to prompt and regular payment, while the penalty of a fine for default is a spur. The example furnished his fellows is contagious. The member is brought in contact with others whose desire is to save, and to get ahead in the world. He imbibes some of their spirit, and in discussion with them he absorbs the desire and ability to save, and to avoid temptations to needless and sometimes harmful expenditure. He acquires not alone the habit of saving, but the equally important habits of temperance, frugality, promptness and industry. These, in turn, valuable in a business point of view, increase the earning capacity of the one in

whom they have been fostered. Increased earnings will mean larger savings, and hope, thus inspired, leads on to independence.

AID IN THE ACQUIREMENT OF A HOME.

The desire to own a home is common to man. The savings and loan association aids to the realization of that desire for many, who might otherwise think it beyond their attainment. It aids the man with very small capital to buy or to build a home, having first encouraged him in the accumulation of that small amount of capital. It loans him money on security which the ordinary money-lender might not accept. It makes him a participant in the profits earned by the interest which he and others pay upon loans. It enables him to have the benefit of his earnings in advance, by building a home and paying for it in monthly installments. These monthly payments on mortgages are more easily met than are the larger half yearly payments of interest on the ordinary mortgage, not to mention the inevitable, often hopeless, struggle to pay the principal. The associations, moreover, do not require the payment of the principal until the shares of stock have matured, when the stock balances and cancels the loan. The borrower is also protected from sudden misfortune. He cannot be sold out until after six months of default in his payments. More important, perhaps, than the other advantages specified is this, that the borrower not only may but must pay off his loan steadily. He has to pay an agreed sum weekly or monthly, and this he will do if he has to deny himself something which, under other circumstances, he would regard as necessary to his comfort.

INTEREST, INSTEAD OF RENT.

The saving and loan associations lead many from the tenement house to homes, and show them how, by paying monthly a little more than the amount they had been paying for rent, they may, in a limited time, become the owners of the houses they occupy. One dollar paid monthly in an association earning a six per cent. dividend will mean an accumulation of \$200 in about eleven years and a half. The following table shows how the small savings in such associations grow under the operation of compound interest, as well as the withdrawal value if a settlement is made before the \$200 limit is reached.

ESTIMATED VALUE, ONE SHARE, AT SIX PER CENT.
EARNING.

YEARS.	Paid in.	Interest Earned.	Book Value.	Withdrawal Value.	Loss per share in Withdrawing.
1	\$ 12.00	\$.39	\$ 12.39	\$ 12.29	\$.10
2	24.00	1.54	25.54	25.56	.28
3	36.00	3.49	39.42	38.88	.54
4	48.00	6.29	54.29	53.59	.70
5	60.00	9.99	69.99	69.07	.92
6	72.00	14.64	86.64	85.48	1.16
7	84.00	20.31	104.31	102.89	1.42
8	96.00	27.06	123.06	121.37	1.69
9	108.00	34.95	142.95	140.98	1.97
10	120.00	44.04	164.04	161.77	2.27
11	132.00	54.43	186.43	183.84	2.59
11½	138.00	62.00	200.00	200.00	....

A payment of two dollars monthly would result in an accumulation of \$400 in the time specified, and a payment of three dollars monthly would entitle the shareholder to \$600. Now, as to the borrower of \$1,000. Here is the result:

\$1,000 LOAN AT SIX PER CENT. NO PREMIUM.

YEARS.	Paid in.	Book Value.	Withdrawal Value.	Balance Due Association if Withdrawn.	Actual Money Paid for Loan.
1	\$ 120.00	\$ 61.95	\$ 61.45	\$935.55	\$ 58.45
2	240.00	127.70	126.30	873.70	113.70
3	360.00	197.10	194.40	805.60	165.60
4	480.00	271.45	267.95	732.05	212.05
5	600.00	349.95	345.35	654.65	254.65
6	720.00	433.20	427.40	572.60	292.60
7	840.00	521.55	519.45	480.55	318.45
8	960.00	615.30	606.85	393.15	353.15
9	1,080.00	714.75	704.90	295.10	375.10
10	1,200.00	820.20	808.85	191.15	391.15
11	1,320.00	932.15	919.20	80.80	400.80
11½	1,380.00	1,000.00	1,000.00	Cancelled.	380.00

To take a concrete case. Suppose that a man is paying \$150 rent (\$12.50 per month) for a house which he can buy, or which he can reproduce, for \$1,500. He has saved \$500. He buys or builds with the aid of a loan of \$1,000 from a savings and loan association. On his five shares (the maturing value of each of which is \$200) he will pay monthly in dues, \$5. He will also pay \$5 per month as interest at six per cent. Just what he will pay for the loan, as also on what terms he could withdraw in any year during the life of the loan, appear in the preceding table.

Assume, further, that the man pays an annual tax of \$20 on his property and an annual water rate of \$10. Then estimate \$15 annually for repairs and insurance, and add to the whole \$20 as interest on the \$500 withdrawn from the savings bank. The total will be \$65, or \$5.42 per month. The monthly account will then be :

Dues on five shares,	\$5.00
Interest,	5.00
Taxes, repairs, interest and water,	5.42
	<hr/> 15.42

Under this arrangement he would pay three dollars more per month than he had been paying in rent, but at the end of eleven or twelve years he would own the property. If the borrower had to pay a premium for his loan, he would pay more per month. A premium of twenty cents per share, for instance, would necessitate the payment of an additional dollar per month. A portion of this would return to him as profits, and the time required to mature the shares would be shortened. On the whole, however, it would be better for him if he could obtain his loan without a premium. But a six per cent. dividend would not likely be earned except by the addition of a small premium to the interest. Any less dividend would, of course, extend the time required for the maturity of the stock, and consequently the number of monthly payments. In any event, the association member has the advantage of being able to apply the rent in payment for his home.

THE QUESTION OF INTEREST RATES.

"But," the reader may say, "on the assumption that the borrower of \$1,000 pays a premium of twenty cents per share, he will virtually pay over seven per cent. interest on his loan. Is it prudent or business-like to do that, when money can be had in the open

market at five or six per cent?" The query assumes that the borrower could have obtained \$1,000 in the money market with the security which he had to offer. This is not an absolutely safe assumption. Moreover, the loan obtained from the money-lender might be repaid in ten or eleven years. That would depend upon the industry, frugality, and perseverance of the borrower. If he borrowed the money from a savings and loan association, he would, almost of necessity, repay it in the time stated. Another point to be considered in this connection is that the agent of the capitalists often exacts a bonus for the granting of the loan. It not infrequently happens that an ordinary loan may be renewed three times during the life of an association loan. When the attendant expense at each renewal is considered, there may not be found to be any great difference between the seven per cent. in the association and the five or six per cent. outside.

It should be remembered also that, as stated before, the borrower shares in the profits arising from the interest he pays, and that high interest rates or high premiums mean a shorter time of maturity. But, as the ratio of borrowers to investors in savings and loan associations is about one to three, it follows that the investors reap three-quarters of the profits. Large profits are only possible through high interest rates or high premiums, and are therefore at the expense of the borrowers. It is to the advantage of the latter that interest rates and premiums should be moderate. It is also to the interest of the associations, since the borrowers make the financial life of such organizations. There is no merit or advantage in the premium plan. The only excuse for its existence is that it provides what seems to be the best way to determine priority of loan. Looked at nakedly, the premium is an evil, and the larger the premium the greater the evil. With the present intelligence of the people, however, the evil of high premiums is one which may be expected to quickly force its own remedy.

It is certain that saving and loan associations are good for the investor. They return him larger profits on small savings than he could obtain elsewhere, and they provide a safe investment. The associations are also good for the borrower, if he does not pay too high a rate of interest or premium. He may be assisted in the buying or the building of a home by a loan which, considering the security he has to offer, he might not be able to obtain elsewhere. In addition, he is permitted—nay, required—to repay this loan in monthly installments. He might accomplish the same result

through the savings banks, but would he do it? The savings associations appeal to people who do not think it worth the trouble, or would be ashamed to deposit in a savings bank the small monthly balance between earnings and living expenses, but which small balance would maintain membership in an association.

SAVINGS NOT OTHERWISE MADE.

Much of the accumulations of savings and loan associations is money which otherwise would have been squandered, or expended unnecessarily. Governor Brackett of Massachusetts in an address in 1888, said: "The deposits in the savings banks have increased \$17,000,000 in the past year. This is important, because it was thought, when building associations were first started, that they would be detrimental to ordinary savings banks. The co-operative banks are getting hold of people who never saved before, and inducing men to lay by some of their earnings, and doing good to the State." It was said in the New Jersey Labor Bureau report for 1891 that the phenomenal development of building and loan associations had apparently not affected deposits in the savings banks. The latter institutions were more prosperous than ever before, though the excess of savings bank deposits over building association assets had been reduced from \$14,000,000 in 1888 to \$8,000,000 in 1891. Charles M. Preston, superintendent of banks in New York State, in his report on savings and loan associations for 1892, expressed the belief "that to a great extent the large amount of savings represented by the building and loan associations of this state are savings that would not have been made except for the existence of the associations; and I am led to believe this from the fact, that, despite the growth of these associations in the last few years, the reports of the savings banks have not ceased to show an ever-progressing rate of increase in their deposits."

BINDING WITH THE TIE OF HOME.

A plan or a system which will stimulate savings that otherwise would not be made is certainly worthy of encouragement. As has been shown, the savings and loan associations do this, and more. They teach thrift, industry, perseverance, promptness, frugality, and temperance, and by each attribute make a better citizen. More than all, they bind the citizen to the soil with the tie of "home." The owner of a dwelling, however humble, has a positive interest in the welfare of the State and of the municipality. He is a more

earnest citizen because of that ownership, and in his home he has an added reason to be patriotic. The tax-list is a concrete thing to him. To him good government means even more than the realization of a just principle, or the triumph of a party policy. To him the teachings of those who would undermine society do not appeal. To him and to the members of his family life is purer and better because of the surroundings, the comforts, and the tender associations of "home." On him the Republic relies for strength and perpetuity.

NATIONAL SAVINGS AND LOAN ASSOCIATIONS.

The reader will bear in mind that what precedes in praise of savings and loan associations applies exclusively to what are known as *local* savings and loan associations. A few remarks here on national savings and loan associations will be in order.

To what extent the national associations have done business in Connecticut it is difficult to say with accuracy. Under present conditions, statistics could not be obtained from them. It is believed, however, that they are operating largely in the State. Their literature is to be found everywhere, and they have offices or agents in all the cities and in many of the large towns in the state.

There is much more difference between a national savings and loan associations and a local association than appears in the titles. The national association too frequently masquerades under a local name. A case in point was observed in Rockville, in this State, where a branch of a foreign association assumed the title of "The Rockville Loan and Building Association," the similarity of which title to that of the local "Rockville Building and Loan Association" is enough to deceive and was evidently calculated to convey erroneous impressions.

The difference between the national and the local associations is not alone in size, or in extent of field of operations. A national saving and loan association is not co-operative in the sense that a local association is. Its members, scattered over many states, cannot attend its meetings. The stock certificates in many of the nationals make an officer of the association a proxy for the stockholder. All that the average stockholder can know of the affairs of the association is what its officers choose to tell him in their periodical statements.

LARGE EXPENSE ACCOUNTS.

In many of the nationals the underlying purpose of the organization is to provide a business and salaries for the organizers. They pay liberal salaries to a large corps of officers and canvassers, and assume the expense of elaborately furnished headquarters. Their expense account is largely in excess of that of the local associations. In the latter it does not exceed three per cent. of the receipts. In the New York locals in 1892 it was 2.89 per cent., in Illinois in the same year 2.35, in New Hampshire in the same year 1.67, in Pennsylvania in 1889 it was 1.11, in New Jersey in 1891 it was .96, in Ohio in 1893 it was .85 and in Massachusetts in 1892 it was .84. In Connecticut in the fiscal year 1893 it was 1.70 per cent. The nationals devote a certain amount of each periodical payment—ranging from six to fourteen per cent.—to what is known as the expense fund. To this, in many associations, is added the entrance and other fees, the whole making a princely sum, no account of which is made by many associations for the information of the stockholders. As an illustration of the fine perquisites which this expense fund affords, it has been figured that if all the local associations in Pennsylvania were one national association, and ten cents on each share payment were set aside for expenses—as is the rule in many national associations—the yearly aggregate would be over \$802,000. By the use of such financial resources, it is claimed that the national associations have been able in certain States to defeat legislation framed to protect their stockholders, from possible unjust loss.

PROMISES OF EXTRAVAGANT DIVIDENDS.

The expense fund, of course, does not share in the profits. The promised rate of dividend, therefore, is a percentage on the loan fund, which is the share payments less the reserve for the expense fund. On this loan fund most extravagant dividends are promised, or “estimated,” twenty per cent. being a modest and conservative estimate, many promising much more. Such high rates of profit cannot be legitimately earned in the business of loaning money on real estate mortgage. Unusual profits require the payment of unusual interest. Some must lose if others gain. An association cannot pay a high per cent. to the investor or the lender, and only collect a low per cent. of interest from the borrower. Yet many of the national associations lure the investor by a promise of twenty

per cent. or more dividend, and attract the borrower by a promise of six per cent. or less interest.

RELYING UPON LAPSES.

Six per cent. cannot pay twenty per cent. Unless more than half of the stockholders drop out, or lapse, the association cannot meet its obligations with the other half. The only expectation the managers of such an association can have, to meet their extravagant promises to stockholders, is through lapses. Many of the associations have a system of unreasonable fines for default in payments. The fines are progressive and quickly wipe out the amount paid in and the forfeitures are virtual confiscation. It is an application of the tontine plan. One issue of a New York newspaper, in recent times, contained in a legal advertised notice the names of over 500 shareholders in a national association, who were in arrears, and whose "shares and all dues paid and profits accrued thereon will be forfeited to said association" unless arrearages were paid before a certain date. As a further illustration, may be cited a western association, which started in 1887 or 1888 with liberal promises to investors of from 20 to 24 per cent. profit. It reported in 1889 earnings of 20 per cent. Now the earnings on the loan fund are 10 per cent. At the start the managers estimated that the stock would mature in 84 months. Now the estimate is 96 months. That this estimate is much too low is evident from the fact that, at the end of 60 months, the book value of a share (par value \$100) was \$40.28.

UNFAVORABLE WITHDRAWAL PROVISIONS.

Many of the national associations have no provision for the withdrawal of stock before maturity. This is unjust to the stockholder who, from choice, may wish to discontinue his payments, and it is also a hardship on the stockholder who, because of misfortune, may be unable to continue payments. Where the withdrawal feature does exist, it is not as favorable to the stockholder as are similar provisions in the local associations. To illustrate this, the withdrawal value of the same amount paid monthly has been figured for a Connecticut local association, for an association operating within State limits, and for two national associations. The amount paid monthly to each association is supposed to be \$15.00. In the Connecticut local association the withdrawing member is paid all dues and all earnings, less one-half of the preceding six months

earnings; in the State association a withdrawal fee of \$2.00 per share is charged, no interest is paid to the member withdrawing within three years, and thereafter five per cent. interest for average time; in one of the nationals (a Michigan association) 10 cents of each 75 cents paid is diverted to the expense fund, and the withdrawing member draws interest on the balance for the average time, at six, seven, or eight per cent., according to time, but does not recover his admission fee of one dollar per share; in the other national (a Minnesota association) 10 cents of each 60 cents paid is diverted to the expense fund, and the withdrawing member draws interest on the balance at six per cent. for the average time, but does not recover his admission fee of one dollar per share, that also going into the expense fund. This will suffice to explain the table.

YEARS.	Paid Each Association.	WITHDRAWAL VALUE.				IN FAVOR OF LOCAL OVER.		
		Con-necticut Local	A State Associa-tion.	A Na-tional of Mich.	A Na-tional of Minn.	The State Asso'n.	The Mich. Nat'n'l	The Minn. Nat'n'l
1	\$180.00	\$184.35	\$150.00	\$140.20	\$139.50	\$34.35	\$44.15	\$44.85
2	360.00	378.90	330.00	313.00	293.00	48.90	65.90	85.90
3	540.00	583.20	510.00	495.80	465.50	73.20	87.40	117.70
4	720.00	803.85	762.00	701.80	647.00	41.85	102.05	156.85
5	900.00	1,036.05	982.50	913.40	837.50	53.55	122.65	198.55
6	1,080.00	1,282.20	1,212.00	1,137.80	1,037.00	70.20	144.40	245.20
7	1,260.00	1,558.35	1,450.50	1,377.76	1,245.50	107.85	180.59	312.85
8	1,440.00	1,820.55	1,698.00	*1,500.00	1,463.00	122.55	....	357.55
9	1,620.00	2,114.70	1,954.50	....	1,689.50	160.20	....	425.20
10	1,800.00	2,426.55	2,220.00	....	1,925.00	206.55	....	501.55
11	1,980.00	2,757.60	2,494.50	....	2,169.50	263.10	....	588.10
11½	2,070.00	3,000.00	3,000.00	....	....	....	....	....
12	....	....	....	....	†2,423.00	....	....	....

LEGISLATIVE RESTRICTIONS.

It has been shown, conclusively it is believed, that in many respects, the national saving and loan association is inferior to the local. It is speculative rather than co-operative; it lacks many of

* Matured in 90 months, shares only \$100 each.

† Not yet matured.

the elements of safety found in a local association ; its expense of management is much larger ; and it cannot keep its extravagant promises to its stockholders without robbing Peter to pay Paul. For these and other reasons the law-makers of many States have deemed it to be their duty, and to the interest of the citizens, to encourage the local building associations, and to discourage the nationals. The latter are required in many States to procure a license with conditions, and to deposit securities sufficient to meet adjudicated claims against them. Statutes of some other States on this subject will be found in later pages of this report. The enactment of such laws elsewhere makes urgent like enactments in Connecticut, to prevent this State from being over-run by associations whose operations have been restricted in other States.

DESIRABILITY OF STATE SUPERVISION.

State supervision of savings and loan associations is desirable for the welfare of the associations and the protection of the public. It is a conceded principle that institutions should not receive the money of the people generally except under the safeguard of the State. This principle is applied in the case of banks and insurance companies. With added reason should it be applied to savings and loan associations, as these associations deal largely with defenseless people, whose knowledge of financial methods is crude. State supervision and inspection would also be accompanied by sworn annual or semi-annual statements of the officers of the associations, and the publication of these statements would be an additional safeguard. Fraud loves the darkness, and publicity would deter deceit and injustice. It would also result in accuracy in keeping accounts, which is a matter of no small importance, and would prompt to greater care and prudence in the conduct of affairs. By the opportunity afforded for comparison of business methods, the safest and most effective could be chosen. State supervision, moreover, would aid largely in establishing public confidence in savings and loan associations, and would thus encourage saving.

SHOULD INCLUDE NATIONAL ASSOCIATIONS.

This State supervision should extend to foreign or national associations, as well as to domestic, to the end that the people may be protected against fraudulent or counterfeit associations, organized to trade upon their credulity or greed. Foreign associations should

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be permitted to do business in the State only upon a license granted after an inspection of methods and of finances, and which license could be revoked for cause. They should be required to deposit securities for the protection of their stockholders in the State, to make periodical reports, and to permit inspection of their affairs and their books at the discretion of the supervising officer. On this subject the Bank Commissioners of the State said in their report in January, 1893:

"There are quite a number of building and loan associations of other States entering our State for the purpose of securing capital by selling their stock. We have examined only such as sell choses in action, but believe that all of them should be under the same supervision as loan and investment companies. There should also be some supervision over building and loan associations chartered by this State."

ATTEMPT AT LEGISLATION IN CONNECTICUT.

At the legislative session of 1893 an attempt was made to secure legislation on savings and loan associations. Two bills were introduced, one putting foreign associations under the supervision of the Bank Commissioners and requiring a deposit with the State Treasurer; the other a general bill for the incorporation, conduct and supervision of building and loan associations, also taxing them and requiring a deposit. The Committee on the Judiciary after hearings, reported a substitute bill, mainly following the lines of the general bill introduced, requiring foreign associations to procure a license to do business in this State, and providing that they be taxed, but omitting the suggestion that they be required to make a deposit with the State Treasurer. The omission was an important one, as, without a deposit, it might be difficult to collect from such foreign associations claims or taxes, or the expenses of examinations or hearings. The only penalty that could be absolutely enforced would be the revocation of the license. The substitute bill, which was passed in the House but rejected in the Senate, is printed in connection with the laws of other States.

SOME SUGGESTIONS.

It is suggested that, in the first place, any general law on the subject of savings and loan associations should adhere closely to the fundamental principles of such associations. These principles, as outlined by Judge Seymour Dexter, of Elmira, N. Y.—an authority on the subject—are:

1. Simplicity of the scheme. It must be so simple that the ordinary wage-earner can understand it.

2. Equity between the borrower and the non-borrower; the borrower obtaining his loan at legal rates of interest, and the non-borrower receiving a higher rate than the savings banks can pay.

3. Security against loss of the funds. The danger against loss is reduced to the minimum when the funds are loaned only upon a bond with first mortgage security upon unencumbered real estate, or secured by stock of the association which exceeds in value the sum loaned.

These principles were followed in the drafting of the laws of Massachusetts and New York upon the subject. It may be further suggested that the law should provide a maximum premium rate, and a minimum withdrawal value, and that these provisions should apply not only to domestic associations but also to associations incorporated in other States and operating in Connecticut.

THE QUESTION OF TAXATION.

The draft of the proposed law reported to the General Assembly in 1893 provided that domestic savings and loan associations should bear, with banks, savings banks and trust companies, their pro-rata share of the cost of State supervision, and should also be taxed as savings banks are taxed. The sentiment of the majority of Connecticut associations was then, and is now, that they be exempt from a direct tax, though, as has been seen, one of the associations is subject to the savings bank tax. As a rule domestic associations are not taxed in other States, and in some States, notably in Michigan and Pennsylvania, the domestic associations are expressly exempted from taxation. The argument advanced in favor of taxation is that the majority of members of a savings and loan association are investors and not borrowers, and proceeding presumably on this argument, Ohio taxes the unpledged stock in savings and loan associations. It is argued, *per contra*, that the State cannot afford to tax the thrift that makes savings and loan associations possible; that it is not wise to tax savings which otherwise would not be made, and thus to discourage the acquirement of taxable property; that a savings and loan association is purely co-operative, securing its profit entirely from its shareholders and dividing it among them; and finally, that at least nine-tenths of the assets of such associations are invested in real estate, which is taxed. It

should be added however, that unpledged stock in the associations does not bear any portion of that tax burden.

VIEWS OF STATE ASSOCIATIONS.

In response to queries on the subject of legislation, nearly all of the domestic associations in Connecticut express a hearty desire for a general law of incorporation, which would provide for State supervision and a periodical publication of financial standing. Some suggest that foreign associations be taxed, and be required to deposit a large amount of securities with the State Treasurer, while others would be satisfied with a provision for a deposit. One desires State supervision, to the end that foreign associations may be carefully scrutinized for the protection of the citizens of the States; and another asks for restrictions on foreign associations similar to those prescribed in Massachusetts.

STATUTES DE SAVING AND LOAN ASSOCIATIONS.

The draft of the proposed law reported to the General Assembly of Connecticut in 1893, and the laws of Massachusetts, New York, Ohio, Pennsylvania and New Jersey, are appended :

THE PROPOSED CONNECTICUT ACT.

Articles of
association.

SECTION 1. Any fifteen or more persons of full age and residents of this State who shall associate by written articles which shall express their agreement to form an association for the purpose of accumulating the savings of its members paid into such association in fixed periodical installments, and lending to its members the funds so accumulated, the name by which it shall be known, the town in this State in which it is to be located, and the limit of capital to be accumulated, shall, when so associated, and when a certificate shall have been filed with the secretary of the State, as hereafter provided, with their associates and successors, become and remain a building and loan association under this act.

Organization
and
by-laws.

SEC. 2. At the first meeting of said association directors who are shareholders shall be elected by ballot, and by-laws for the regulation of the affairs of the associations may be adopted; a copy of which by-laws and all subsequent amendments thereto shall be filed with the bank commissioners within thirty days after their adoption. At any subsequent meeting of the association specially called for that purpose by-laws may be adopted, or the by-laws previously adopted

may be altered or repealed. The directors shall cause the articles of association to be published at full length in a newspaper published in the county where said association is located; and a majority of the directors shall make, sign and swear to a certificate setting forth a true copy of the articles of association, which certificate shall state that such publication has been made, and also the name of the newspaper containing such publication, with the date thereof, which certificate shall be deposited in the office of the secretary of the State, who shall cause the same to be recorded, and a duplicate thereof shall be recorded in the town clerk's office of the town where said association is located.

Articles of
association
to be pub-
lished and
filed.

SEC. 3. The name shall be one not in use by any existing association established under the laws of this State, and shall be changed only by act of the general assembly, which name shall express its objects and purpose as set forth in section one, and shall commence with "The" and end with "Association."

Name.

SEC. 4. The capital to be accumulated shall not exceed one million dollars, and shall be divided into shares, the ultimate value of which shall not be greater than two hundred and fifty dollars each, nor less than two hundred dollars each, as may be determined by the by-laws. The limitation of capital to be accumulated in any association now organized or hereafter formed under the provisions of this act shall be held to apply to capital actually paid in, and no such association shall be restrained from issuing shares so long as the capital actually paid in on shares is not in excess of one million dollars. The shares may be issued in monthly, quarterly, half yearly or yearly series, in such amounts and at such times as the members may determine. No person shall hold more than twenty-five shares in the capital of any such association. No shares of a prior series shall be issued after the issue of a new series.

Limitation
of capital
and of shares.

Series.

Limitation
of holding.

SEC. 5. The number, title, duties and compensation of the officers of the association, their terms of office, the time of their election, as well as the qualifications of electors, and time of each periodical meeting of the officers and members, shall be determined by the by-laws; but no member shall be entitled to more than one vote at any election. All officers shall continue in office until their successors are duly elected and qualified, and no association shall expire from neglect on its part to elect officers at the time prescribed by the by-laws.

Election of
officers.

SEC. 6. The officers shall hold stated weekly, semi-monthly or monthly meetings. At or before each of these

Dues.

meetings every member shall pay to the association, as a contribution to its capital, the sum named in the by-laws as dues upon each share held by him, until the share reaches the ultimate or paid up value of the share as fixed by the by-laws, or is withdrawn, canceled or forfeited. Payment of dues on each series shall commence from its issue.

Fines.

SEC. 7. Associations shall have the power to impose and collect a fine from each shareholder for every neglect or refusal to make his payments of dues, interest or premium when due, in such sum and in such manner as their by-laws determine. Associations shall also have the power to charge an entrance fee upon each share of stock issued, not exceeding twenty-five cents on each share.

Entrance
fee.

Withdrawal
provisions.

SEC. 8. Any member may withdraw his unpledged shares at any time by giving thirty days' notice of his intention to do so in writing. Upon such withdrawal, the shareholder's accounts shall be settled as follows: From the amount then standing to the credit of the shares to be withdrawn there shall be deducted all fines, a proportionate part of any unadjusted loss, together with such proportion of the profits previously credited to the shares as the by-laws may provide, and such shareholder shall be paid the balance; *provided*, that at no time shall more than one-half, of the receipts of the association, and, when the association is indebted upon matured shares, no more than one-third, be applicable to the payment of withdrawing shareholders without the consent of the directors; and when the demands of the withdrawing shareholders exceed the money applicable to their payment, they shall be paid in the order in which their notices of withdrawal were filed with the secretary. The directors may, at their discretion, under rules made by them, retire the unpledged shares of any series at any time after four years from the date of their issue by enforcing the withdrawal of the same; but whenever there shall remain in any series, at the expiration of five years after the date of its issue, an excess above one hundred unpledged shares, then it shall be the duty of the directors to retire annually twenty-five per centum of such excess existing at said expiration of five years after the date of its issue, so that not more than one hundred unpledged shares shall remain in such series at the expiration of nine years from the date of its issue, and thereafter the directors may, in their discretion, retire such other unpledged shares as they consider the best interests of the association to require; *provided*, that whenever, under the provisions of this section the withdrawal of shares is to be enforced, the shares to be retired shall be determined by lot, and the holders thereof shall be paid in full value of their shares,

Enforced
withdrawal

less all fines and a proportionate part of any unadjusted loss; *provided*, also, that shares pledged for share loans shall be treated as unpledged shares. Shares may be issued in the name of a minor, and, if so issued, may, at the discretion of the directors, be withdrawn, in manner as provided in this act, by such minor, the parent or guardian of such minor, and in either case payments made on such withdrawals of shares shall be valid. When a share or shares are held by any one in trust for another, the name and residence of the person for whom such share or shares are held shall be disclosed; and the account shall be kept in the name of such holder as trustee for such person; and, if no other notice of the existence and terms of such trust has been given in writing to the association, in the event of the death of the trustee, such shares may be withdrawn by the person for whom the deposit was made, or by his legal representatives.

Shares in
the name
of a minor.

Shares held
in trust.

SEC. 9. No transfer of shares shall be binding upon the association until the same has been made upon the books of the association, and the transferee thereof shall take the same, charged with all the liabilities and conditions attaching thereto in the hands of one transferring the same. The association may require a "transfer fee" not exceeding twenty-five cents.

Transfers.

SEC. 10. When each unpledged share of a given series reaches the ultimate or paid-up value as fixed in the by-laws, all payment of dues thereon shall cease, and the holder thereof shall be paid out of the funds of the association the matured or paid-up value of the shares as may have been fixed by the by-laws, less all arrears and fines upon such matured shares, with interest at a rate not larger than six per centum a year from the time of such maturity to the time of payment; *provided*, that at no time shall more than one-half of the funds in the treasury be applicable to the payment of such matured shares without the consent of the directors; *provided further*, that when any series of shares, either pledged or unpledged, reaches maturity between the dates of adjustment or profits, or whenever shares are retired between such dates, the holders of such shares shall, in addition to the value thereof, be entitled to interest at a rate not larger than six per centum per annum for all full months from the date of the preceding adjustment.

Payment
of matured
shares.

SEC. 11. The moneys accumulated, after due allowance made for all necessary and proper expenses, and for the withdrawal of shares, shall, at any meeting called by the board of directors, be offered to the members according to the premiums bid by them for priority of right to a loan. Each member whose bid is accepted shall be entitled, upon

Loans and
investments.

giving proper security, to receive a loan equal in amount to the ultimate fixed value of one share of stock for each share held by him, or such fractional part thereof as the by-laws may allow. If a balance of money remains unsold after any sale, the directors may invest the same in any of the personal securities named in section 1800 of the general statutes, or may loan the same upon the shares of the corporation, on the approval of the directors or investing committee thereof.

Borrowing
money.

SEC. 12. Any association organized in pursuance of the provisions of this act may borrow money for the purpose of making loans or paying withdrawals, not exceeding, however, two thousand dollars, so long as its accumulated capital shall be over ten thousand dollars and does not exceed sixty thousand dollars; and when its accumulated capital exceeds sixty thousand dollars, it may borrow money for the purposes aforesaid, not exceeding ten per centum of its accumulated capital. No money borrowed shall be for a longer term than one year. Any association having a surplus in its treasury for which there is no demand for loans, withdrawing shareholders or matured stock, may, in addition to the provisions of section ten of this act, loan the same to another association, organized under the provisions of this act, subject to the provisions of this section, on the part of the borrowing association. No association shall borrow or make loans authorized in this section, except by a majority vote of all the members of its board of directors, the vote to be recorded by ayes and nays in its regular minutes.

Loan of
surplus
to other as-
sociations.

Premiums.

SEC. 13. Associations may receive premiums for loans in regular stated payments, in addition to interest upon the same, which shall be deemed to be a consideration paid by the borrower for the present use and possession of the future or ultimate value of his shares, and shall, together with interest and fines, be received by the association as a profit on the capital invested in the loan, and shall be distributed to the various shares and series of said capital, as hereinafter provided.

Interest
rates.

SEC. 14. A borrowing member, for each share borrowed upon, shall, in addition to his dues and weekly, semi-monthly or monthly premium, pay weekly, semi-monthly or monthly interest on his loan at a rate not larger than six per centum per annum until his shares reach their ultimate paid-up value, or the loan has been repaid; and when said ultimate value is reached, said shares and loan shall be declared canceled and satisfied, and the balance, if any, due upon the shares shall be paid to the member. Requiring and receiving such rate of interest and premiums, or any

Not
usurious.

other moneys which the association may require under the provisions of this act, shall not be deemed a violation of the usury laws.

SEC. 15. For every loan made, a note secured by first mortgage of real estate situated within such limits may be prescribed by the by-laws, or a second mortgage, when the first mortgage was given to and is held by the association, shall be given, accompanied by a transfer and pledge of the shares of the borrower. The shares so pledged shall be held by the association as collateral security for the performance of the conditions of said note and mortgage. Said note and mortgage shall recite the number of shares pledged and the amount of money advanced thereon, and shall be conditioned for the payment, at the stated meetings of the association, of the weekly, semi-monthly or monthly dues on said shares, and the interest and premiums upon the loan, together with all fines on payments in arrears until said shares reach their ultimate paid-up value, or said loan is otherwise canceled or discharged; *provided*, that the shares, without other security, may, in the discretion of the directors, be pledged as security for loans, to an amount not exceeding their value as adjusted at the last adjustment and valuation of shares before the time of the loan; *and provided*, that when any loan is made by such association upon real estate security, the property constituting the security shall be appraised by two or more suitable persons, one to be an officer of the association; such appraisal, together with the certificate of title, shall be sworn to by said appraisers, and lodged and kept with the association making such loans; and such appraisal shall express upon its face the amount at which said property is appraised; or, in lieu of the mortgage, the borrower or another may transfer and pledge to the association for the payment of the loan free shares, the withdrawal value of which, under the by-laws, at the time of such borrowing, shall exceed the amount borrowed and the interest thereon for six months, and all fines that could accrue in case the borrower should default the payment of the dues upon the shares borrowed upon; but an association may provide by its by-laws that it will not make share or stock loans. If the borrower neglects to offer security satisfactory to the directors within the time prescribed by the by-laws, his right to the loan shall be forfeited, and he may be charged with one month's interest and one month's premium at the rate bid by him, together with all expenses, if any, incurred; and the money appropriated for such loan may be re-loaned at the next or any subsequent meeting.

Security
for loans.

Appraisals.

Stock loans.

Unsatisfactory
security forfeits right to
loan.

SEC. 16. A borrower may repay a loan at any time upon

Repayment
of loan.

application to the association, whereupon, on settlement of his account, he shall be charged with the full amount of the original loan, together with all monthly installments of interest, premium and fines in arrears, and shall be given credit for the withdrawing value of his shares pledged and transferred as security; and the balance shall be received by the corporation in full satisfaction and discharge of said loan; *provided*, that all settlements made at periods intervening between stated meetings of the directors shall be made as of the date of the stated meetings next succeeding such settlements; and *provided*, that a borrower desiring to retain his shares and membership may at his option repay his loan without claiming credit for said shares, whereupon said shares shall be re-transferred to him, and shall be free from any claim by reason of said canceled loan. Partial payment of loans on real estate made by such association may be received in sums equal to one-fourth of the ultimate paid-up value of one share or any multiple thereof; and for each sum representing the ultimate value of a share so repaid, one share of stock shall be released from pledge.

Partial
payments.

Penalty for
default
in payments.

SEC. 17. Members who make default in the payment of their weekly, semi-monthly or monthly dues, interest and premiums, shall be charged a fine such as is prescribed by the by-laws of the association. No fines shall be charged after the expiration of six months from the first lapse in any such payment, nor upon a fine in arrears. The shares of a member who continues in arrears more than six months shall, at the option of the directors, if the member fails to pay the arrears within thirty days after notice, be declared forfeited, and the withdrawing value of the shares at the time of the first default shall be ascertained, and, after deducting all fines and other legal charges, the balance remaining shall be transferred to an account to be designated the "Forfeited Share Account," to the credit of the defaulting member. Said member, if not a borrower, shall be entitled, upon thirty days' notice, to receive the balance so transferred without interest from the time of the transfer, in the order of his turn out of the funds appropriated to the payment of withdrawals. All shares so forfeited or transferred shall cease to participate in any profits of the association accruing after the last adjustment and valuation of shares before said first default.

Forfeited
shares.

Foreclosure
provisions.

SEC. 18. If a borrowing member is in arrears for dues, interest, premium or fines for six months or more, the directors may, at their discretion, declare the shares forfeited after one month's notice to said delinquent, if the arrears continue unpaid. The account of such borrowing member shall then be debted with the arrears of interest,

"premium" and fines of dates of forfeiture, and the shares, shall be credited upon the loan at their withdrawing value. The balance of the account may, and after six months shall, be enforced against the security, and be recovered as secured debts are recovered at law.

SEC. 19. The general accounts of every such association shall be kept by double entry, and in ink. All moneys received by the association from each member shall be receipted for by a person designated by the directors in a pass-book provided by the association for the use of, and to be held by, the member; and said pass-book shall be plainly marked with the name and residence of the holder thereof, the number of shares held by him and the number or designation of the series or issue to which said shares respectively belong, and the date of the issue of such series. All moneys so received shall be entered by the proper officer in a book to be called the "Cash Book," to be provided by the association for the purpose, and the entries therein shall be so made as to show the name of the payer or his number, together with the amount of dues, interest, premiums and fines thereon, as the case may be. Each payment shall be classified and entered into a column devoted to its kind. Said cash book shall be closed after the termination of each stated meeting. All payments made by the association for any purposes whatsoever shall be by order, check or draft upon the treasurer, signed by the president and secretary, and endorsed by the persons in whose favor the same are drawn. The name of the payee, the amount paid, and the purpose, object or thing for which the payment is made, together with its date, shall be entered on the margin of said order, check or draft. The treasurer shall dispose of and secure the safe keeping of all moneys, securities and property of the association in the manner designated by the by-laws, and the treasurer and secretary of each building and loan association shall give bonds, with surety, to the acceptance of the directors, in not less than five thousand dollars, payable to said association, and shall give new bonds, with surety, to the acceptance of the directors, as often as once in every period of three years from the date of giving the last bond, for the faithful performance of their respective duties. The said bonds shall be forthwith recorded at length in the books of said association, and shall at all times be subject to the inspection of the bank commissioners; and it shall be the duty of the president of said association to safely keep the original bonds given. No president or director of any such association shall be surety on the bonds of such treasurer or secretary.

How
accounts
are to be kept.

Payments by
check or
draft.

Financial
officers to be
bonded.

Distribution
of profits
and losses.

SEC. 20. The profits and losses may be distributed annually, semi-annually or quarterly to the shares then existing, but shall be distributed at least once a year. Profits and losses shall be distributed to the various shares existing at the time of such distribution in proportion to their value at the time of the last preceding distribution, and shall be computed upon the basis of a single share fully paid to the date of distribution. Losses shall be apportioned immediately after their occurrence. At each periodical distribution of profits the directors shall reserve, as a guaranty fund, a sum not less than one-fourth nor more than one per centum of the dues capital of the association, until such fund amounts to five per centum of the dues capital, which fund shall thereafter be maintained and held; and said fund shall be at all times available to meet losses in the business of the association from depreciation of its securities or otherwise.

Guaranty
fund.

Purchase
and sale of
real estate.

SEC. 21. Any association may purchase at any sale, public or private, any real estate upon which it may have a mortgage, judgment, lien or incumbrance, or in which it may have an interest; and may sell, convey, lease or mortgage, at pleasure, the real estate so purchased to any person or persons whatsoever. All real estate so acquired shall be sold within five years from the acquisition of the title thereto.

Supervision
by bank
com-
missioners.

SEC. 22. The bank commissioners shall perform, in reference to every such association, the same duties, and shall have the same powers, and shall be paid in the same manner as are required of or given to them in reference to banks, savings banks and trust companies, and shall annually make report to the general assembly of such facts and statements respecting such associations, and in such form as they deem that the public interest requires. Every officer of such association shall answer truly all inquiries made, and shall make all returns required by the commissioners.

Returns to
bank com-
missioners.

SEC. 23. The treasurer of every such association shall, on or before the tenth day of October in each year, and oftener if required by the bank commissioners, make a return to said bank commissioners in such form as may be prescribed by them, showing accurately the condition thereof at close of business on the first day of October next preceding, which return shall be signed and sworn to by the secretary and treasurer of such association. The president and five or more of the directors shall certify and make oath that the report is correct according to the best of their knowledge and belief.

SEC. 24. Any association now existing may become entitled to the benefits of this act and incorporate or rein-

corporate under its provisions, when its purpose so to do shall be determined by a two-thirds vote of its members present at a meeting specially called for that purpose, and by filing with the secretary of this State a certificate of organization as prescribed in sections one and two of this act; but any association now existing and which shall not be incorporated under the provisions of this act shall be subject (to all the provisions of this act which relate to the bank commissioners) to the provisions of sections 22 and 23 of this act.

Existing associations may reincorporate.

Unincorporated associations.

SEC. 25. Every such association formed or organized under the provisions of section twenty-four of this act shall be a body politic and corporate by the name adopted in said certificate, and by such name shall have power to sue and be sued, plead and be impleaded, in all suits whatever at law or equity; and shall have, possess and enjoy all the rights and privileges, and be subject to all the duties possessed by and enjoined upon such associations by the provisions of this act.

SEC. 26. The directors or managers of any such association assenting to or ratifying a violation of any provision of law relating to such associations shall be jointly and severally liable to said associations for any loss which may result therefrom. And any officer or director of any such association who shall intentionally violate any of the provisions of the preceding sections shall be fined not less than one hundred nor more than one thousand dollars; and it shall be the duty of the State's attorney for the county where such association is located to prosecute such violation on complaint thereof by the bank commissioners.

Penalty for official dereliction.

State's attorney to prosecute.

SEC. 27. No person, association or corporation shall carry on the business of accumulating the savings of its members and loaning to them such accumulations in the manner of said association within this State, after the passage of this act, unless incorporated under the foregoing provisions for such a purpose. This section shall not apply to those associations created and chartered by special act of the general assembly.

Must be incorporated or chartered.

SEC. 28. Each association incorporated under the foregoing provisions shall be deemed an institution for savings, and not taxable under any tax law which shall exempt savings banks or institutions for savings from taxation, nor shall any law passed hereafter taxing corporations in any form be deemed to include associations under this act, unless they are specifically named in the law.

Taxation.

SEC. 29. Every foreign association or corporation organized under the laws of other States and doing business in this State similar to that contemplated by this act,

Foreign associations subject to provisions.

and commonly known by the name of building and loan associations, shall be subject to the provisions of this act.

Certification
and statement
by foreign
associations.

SEC. 30. Every such foreign association or corporation shall be required, before doing any business in this State, to file certified copies of their articles of incorporation, constitution and by-laws, with a statement, verified by the oath of its president and secretary, showing that said company is duly organized, with the bank commissioners, together with a sworn statement of its assets and liabilities; they shall furnish annually, during the month of January, to the bank commissioners of this state a sworn statement showing their condition on the first day of said month. The statement shall also show the amount collected from Connecticut stockholders during the year next preceding to the date of said statement, as to dues, repayments upon loans, interest, premiums and fines, together with the total amount at that date due to members for dues capital. Said associations shall be required to pay annually during the month of July into the treasury of this State a tax equal to two per centum of the total amount due to residents of this State, as shown by the statement filed with the bank commissioners during the preceding January. Said bank commissioners may further require from such associations or corporations returns to be made to them in such form and at such times as they may elect.

Tax on
foreign
associations.

Bank com-
missioners
attorneys of
foreign
corporations

SEC. 31. No such foreign building and loan association shall, directly or indirectly, transact any business in this State until it shall have first appointed, in writing, the bank commissioners of this State to be the true and lawful attorneys of such association, in and for this State, upon whom all lawful process, in any action or proceeding against the association, may be served with the same effect as if the association existed in this State. Said power of attorney shall stipulate and agree on the part of the association that any lawful process against the same which is served on said attorneys shall be of the same legal force and validity as if served on the association, and the authority shall continue in force as long as any liability remains outstanding against the association in this State. A certificate of such appointment, duly certified and authenticated, shall be filed in the office of the bank commissioners, and copies certified by either one of said commissioners shall be deemed sufficient evidence. Service upon such attorneys shall be deemed sufficient service upon the principal.

Service of
process
and fee.

SEC. 32. Whenever lawful process against such foreign building and loan association shall be served upon the bank commissioners, they shall forthwith forward a copy of the process served on them by mail, postpaid, and directed to

the secretary of the association. For each copy of process the commissioners shall collect the sum of two dollars, which shall be paid by the plaintiff at the time of such service, the same to be recovered by him as part of the taxable costs if he prevails in the suit.

SEC. 33. If the bank commissioners be satisfied with said certificate, and if said association shall have complied with all other provisions of law, they shall thereupon issue their license to it to transact business in this State for one year from the first day of April following; but no such license shall issue unless such certificate is furnished, and said commissioners may at any time revoke such license when, in their judgment, it is best so to do.

License
to foreign
associations.

SEC. 34. No person shall act as agent of any such foreign association until such association shall have complied with all the requirements of the laws of this State relating to such associations, and every person acting without such compliance shall be fined one thousand dollars.

Penalty for
agents of
unauthorized
associations.

SEC. 35. The bank commissioners may at any time examine into the affairs of any such foreign building and loan association. The officers or agents of such foreign association shall exhibit its books to said commissioners, and otherwise facilitate such examination, and the commissioners may examine, under oath, the officers and agents of any such company in relation to its officers; and said commissioners shall, if they deem best so to do, publish the result of such investigation in one or more newspapers published in this State. When it shall appear to said bank commissioners, from the statement or from an examination of the affairs of any such association, that such association is insolvent, or is conducting its business fraudulently, or refuses or neglects to comply with the laws of the State relating to such associations, it shall be the duty of said commissioners to revoke the license issued to any such foreign association, and they shall cause a notice thereof to be published in one or more newspapers published in this State, and the agent or agents of such association, after such notice, shall transact no further business in this State. All expense of an examination made under the provisions of this section shall be paid to the bank commissioners by the association examined.

Examination
of foreign
associations.

Revocation of
license.

SEC. 36. Should any such foreign association neglect or refuse to pay any legal claims due to any person who is a resident of this State, such person may bring his petition to the bank commissioners, alleging such neglect and refusal of such association to pay such claim, and praying for a revocation of the license of such association. Said commissioners shall thereupon issue an order of notice requiring

Proceeding
on unpaid
claims.

notice to be given by mail to the secretary of said association, of the pendency of such petition and the time and place at which the same will be heard. If, upon hearing had, the bank commissioners find the allegation of such petition true, they shall immediately revoke the license of said foreign building and loan association, and shall cause a notice thereof to be published as required in the preceding section of this act. The expense of such hearing shall be paid to the bank commissioners by such association, and the petitioner may recover his legal expenses incurred by said hearing from such association, the same to be taxed and allowed by said commissioners.

Fees and
taxes
forfeited.

SEC. 37. Whenever any license of such association shall be revoked by the bank commissioners, all license fees paid and all taxes laid or due shall be forfeited to the State.

Omnibus
penalty
clause.

SEC. 38. Every person who shall violate any of the foregoing provisions, for which no other penalty is provided or provision made, shall be fined not less than one hundred dollars, nor more than one thousand dollars.

MASSACHUSETTS.

Corporations
for accumula-
tion of sav-
ings of mem-
bers and
lending funds
to members.

Twenty-five or more persons who associate themselves together by an agreement in writing with the intention of forming a corporation for the purpose of accumulating the savings of its members paid into such corporation in fixed periodical installments and lending to its members the funds so accumulated shall, by and with the consent of the board of commissioners of savings banks, become a corporation upon complying with the provisions of the three following sections.

Agreement,
what to set
forth.

The agreement shall set forth the fact that the subscribers thereto associated themselves with the intention of forming a corporation; the name by which the corporation shall be known; the purpose for which it is formed; the town or city, which shall be within this Commonwealth, in which it is located; and the limit of capital to be accumulated.

Name.

The name shall be one not previously in use by any existing corporation established under the laws of this Commonwealth, and shall be changed only by act of the General Court. The words "co-operative bank" shall form a part of the name.

Corporation,
how organ-
ized.

The provisions of sections eighteen, twenty, and twenty-one of chapter one hundred and six shall apply to such corporations (prescribing the methods of calling the first

meeting, election of officers and making returns of the organization to the commissioner of corporations and Secretary of State), except that, in the certificate signed by the secretary of the Commonwealth, the limit of capital to be accumulated, as fixed in the agreement of association, shall be inserted, instead of the amount of the capital, that the certificate required by said section twenty-one to be filed and recorded may be signed and sworn to by the presiding and financial officers, and a majority at least of the officers possessing the powers of directors by whatever name they may be called, and that the fees to be paid for filing and recording the certificates required by said section twenty-one, including the issuing of the certificate of organization, shall be five dollars.

The capital to be accumulated shall not exceed one million dollars, and shall be divided into shares of the ultimate value of two hundred dollars each. The limitation of capital to be accumulated in any co-operative bank now organized or hereafter formed under the provisions of chapter one hundred and seventeen of the Public Statutes shall be held to apply to capital actually paid in, and no such bank shall be restrained from issuing shares so long as the capital actually paid in on shares is not in excess of one million dollars. The shares may be issued in quarterly, half-yearly, or yearly series, in such amounts and at such times as the members may determine. No person shall hold more than twenty-five shares in the capital of any one such corporation. No shares of a prior series shall be issued after the issue of a new series.

The number, title, duties and compensation of the officers of the corporation, their terms of office, the time of their election, as well as the qualifications of electors, and time of each periodical meeting of the officers and members, shall be determined by the by-laws; but no member shall be entitled to more than one vote at any election. All officers shall continue in office until their successors are duly elected, and no corporation shall expire from neglect on its part to elect officers at the time prescribed by the by-laws.

In any co-operative bank now or hereafter formed under the provisions of chapter one hundred and seventeen of the Public Statutes, the offices of secretary and treasurer may be held by one and the same person.

The officers shall hold stated monthly meetings. At or before each of these meetings every member shall pay to the corporation, as a contribution to its capital, one dollar as dues upon each share held by him until the share reaches the ultimate value of two hundred dollars, or is withdrawn,

Limit of
capital.

Plans of
issuing stock,
etc.

By-laws.
Officers to
hold office
until suc-
cessors are
elected.

One person
may be both
secretary and
treasurer.

Monthly
meetings.
Dues.

cancelled, or forfeited. Payment of dues on each series shall commence from its issue.

Withdrawal
of shares.

A member may withdraw his unpledged shares at any time by giving thirty days' notice of his intention so to do, written in a book held and provided by the corporation for that purpose. Upon such withdrawal the shareholders' account shall be settled as follows:— From the amount then standing to the credit of the shares to be withdrawn there shall be deducted all fines, a proportionate part of any unadjusted loss, together with such proportion of the profits previously credited to the shares as the by-laws may provide, and such shareholders shall be paid the balance: *provided*, that at no time shall more than one-half of the funds in the treasury be applicable to the demands of withdrawing members without the consent of the directors. The directors may, at their discretion, under rules made by them, retire the unpledged shares of any series at any time after four years from the date of their issue, by enforcing the withdrawal of the same; but whenever there shall remain in any series, at the expiration of five years after the date of its issue, an excess above one hundred unpledged shares, then it shall be the duty of the directors to retire annually twenty-five per centum of such excess existing at said expiration of five years after the date of its issue, so that not more than one hundred unpledged shares shall remain in such series at the expiration of nine years from the date of its issue, and thereafter the directors may in their discretion retire such other unpledged shares as they consider the best interests of the bank to require: *provided*, that whenever under the provisions of this section the withdrawal of shares is to be enforced the shares to be retired shall be determined by lot, and the holders thereof shall be paid the full value of their shares, less all fines and a proportionate part of any unadjusted loss: *provided also*, that shares pledged for share loans shall be treated as unpledged shares.

Shares may be issued in the name of a minor, and if so issued may, at the discretion of the directors, be withdrawn in manner as provided in section two of this act, by such minor, the parent or guardian of such minor, and in either case payments made on such withdrawals of shares shall be valid. When a share or shares are held by any one in trust for another, the name and residence of the person for whom such share or shares are held shall be disclosed; and the account shall be kept in the name of such holder as trustee for such person; and, if no other notice of the existence and terms of such trust has been given in writing to the corporation, in the event of the death of the trustee, such

shares may be withdrawn by the person for whom such deposit was made or by his legal representatives.

When each unpledged share of a given series reaches the value of two hundred dollars, all payments of dues thereon shall cease, and the holder thereof shall be paid out of the funds of the corporation two hundred dollars thereof, with interest at the rate of six per cent. a year from the time of such maturity to the time of payment: *provided*, that at no time shall more than one-half of the funds in the treasury be applicable to the payment of such matured shares without the consent of the directors: *provided further*, that when any series of shares, either pledged or unpledged, reaches maturity between the dates of adjustment of profits, or whenever shares are retired between such dates, the holders of such shares shall in addition to the value thereof, be entitled to interest at the rate of six per cent. per annum for all full months from the date of the preceding adjustment. And that before paying matured shares all arrears and fines shall be deducted.

Shares, when matured.

The moneys accumulated, after due allowance made for all necessary and proper expenses and for the withdrawal of shares, shall, at each stated monthly meeting, be offered to the members according to the premiums bid by them for priority of right to a loan. Each member whose bid is accepted shall be entitled upon giving proper security to receive a loan of two hundred dollars for each share held by him, or such fractional part of two hundred dollars as the by-laws may allow. If a balance of money remains unsold after a monthly sale, the directors may invest the same in any of the securities named in the second clause of section twenty of chapter one hundred and sixteen, or may loan the same upon the shares of the corporation, on the approval of the directors or investing committee thereof, at the highest rate paid at the last preceding monthly sale of such moneys.

Moneys to be lent by monthly sales; how invested, if unsold.

Premiums for loans shall consist of a percentage charged on the amount lent in addition to interest, and shall be deemed to be a consideration paid by the borrower for the present use and possession of the future or ultimate value of his shares, and shall, together with interest and fines, be received by the corporation as a profit on the capital invested in the loan, and shall be distributed to the various shares and series of said capital as hereinafter provided.

Premiums.

A borrowing member, for each share borrowed upon, shall, in addition to his dues and monthly premium, pay monthly interest on his loan at the rate of six per cent. per annum until his shares reach the ultimate value of two hundred dollars each, or the loan has been repaid; and when said ultimate value is reached said shares and

Interest.

loan shall be declared cancelled and satisfied, and the balance, if any, due upon the shares shall be paid to the member. Any corporation may provide in its by-laws that the bid for loans at its stated monthly meeting shall, instead of a premium, be a rate of annual interest upon the sum desired, payable in monthly installments. Such bids shall include the whole interest to be paid, and may be at any rate not less than five per centum per annum.

Security.

For every loan made, a note secured by first mortgage of real estate situated in this Commonwealth shall be given, accompanied by a transfer and pledge of the shares of the borrower. The shares so pledged shall be held by the corporation as collateral security for the performance of the conditions of said note and mortgage. Said note and mortgage shall recite the number of shares pledged and the amount of money advanced thereon, and shall be conditioned for the payment, at the stated meetings of the corporation, of the monthly dues on said shares, and the interest and premium upon the loan, together with all fines on payments in arrears until said shares reach the ultimate value of two hundred dollars each, or said loan is otherwise cancelled or discharged: *provided*, that the shares, without other security, may, in the discretion of the directors, be pledged as security for loans, to an amount not exceeding their value as adjusted at the last adjustment and valuation of shares before the time of the loan.

Neglect to
offer
security.

If the borrower neglects to offer security satisfactory to the directors within the time prescribed by the by-laws, his right to the loan shall be forfeited, and he shall be charged with one month's interest and one month's premium at the rate bid by him, together with all expenses, if any, incurred, and the money appropriated for such loan may be re-loaned at the next or any subsequent meeting.

Payment.

A borrower may repay a loan at any time, upon application to the corporation, whereupon, on settlement of his account, he shall be charged with the full amount of the original loan, together with all monthly installments of interest, premium, and fines in arrears, and shall be given credit for the withdrawing value of his shares pledged and transferred as security; and the balance shall be received by the corporation in full satisfaction and discharge of said loan: *provided*, that all settlements made at periods intervening between stated meetings of the directors shall be made as of the date of the stated meetings next succeeding such settlement; and *provided*, that a borrower desiring to retain his shares and membership may at his option repay his loan without claiming credit for said shares, whereupon said shares shall be re-transferred to him, and shall be free

from any claim by reason of said cancelled loan. Partial payment of loans on real estate made by any co-operative bank may be received in sums of fifty dollars or any multiple thereof; and for each two hundred dollars so repaid one share of stock shall be released from pledge.

Members who make default in the payment of their monthly dues, interest and premiums, shall be charged a fine not exceeding two per cent. a month on each dollar in arrears. No fines shall be charged after the expiration of six months from the first lapse in any such payment, nor upon a fine in arrears. The shares of a member who continues in arrears more than six months shall, at the option of the directors, if the member fails to pay the arrears within thirty days after notice, be declared forfeited, and the withdrawing value of the shares at the time of the first default shall be ascertained, and, after deducting all fines and other legal charges, the balance remaining shall be transferred to an account to be designated the "Forfeited Share Account," to the credit of the defaulting member. Said member, if not a borrower, shall be entitled, upon thirty days' notice, to receive the balance so transferred without interest from the time of the transfer, in the order of his turn, out of the funds appropriated to the payment of withdrawals. All shares so forfeited or transferred shall cease to participate in any profits of the corporation accruing after the last adjustment and valuation of shares before said first default.

Fines,
forfeiture of
shares.

If a borrowing member is in arrears for dues, interest, premium or fines for more than six months, the directors may, at their discretion, declare the shares forfeited, after one month's notice, if the arrears continue unpaid. The account of such borrowing member shall then be debited with the arrears of interest "premium" and fines of date of forfeiture, and the shares shall be credited upon the loan at their withdrawing value. The balance of the account may, and after six months shall, be enforced against the security, and be recovered as secured debts are recovered at law.

Recovery of
loan.

The general accounts of every such corporation shall be kept by double entry. All moneys received by the corporation from each member shall be receipted for by persons designated by the directors, in a pass-book provided by the corporation for the use of, and to be held by, the member; and said pass-book shall be plainly marked with the name and residence of the holder thereof, the number of shares held by him, and the number or designation of the series or issue to which said shares respectively belong, and the date of the issue of such series. All moneys so received shall be originally entered by the proper officer in a book to be called

Books of
account.
Duties of
treasurer, etc.

the "cash-book," to be provided by the corporation for the purpose, and the entries therein shall be so made as to show the name of the payer, the number of shares, the number or designation of the series or issues of the particular share or shares, so entered, together with the amount of dues, interest, premiums and fines paid thereon, as the case may be. Each payment shall be classified and entered into a column devoted to its kind. Said cash-book shall be closed after the termination of each stated meeting, and shall be an exhibit of the receipts of all moneys paid at said meeting. All payments made by the corporation for any purpose whatsoever shall be by order, check or draft upon the treasurer, signed by the president and secretary, and endorsed by the persons in whose favor the same are drawn. The name of the payee, the amount paid, and the purpose, object or thing for which the payment is made, together with its date, shall be entered on the margin of said order, check or draft. The treasurer shall dispose of and secure the safe keeping of all moneys, securities, and property of the corporation, in the manner designated by the by-laws, and the treasurer and secretary shall give such security for the faithful performance of their respective duties as the by-laws may direct.

Distribution
of profits
and losses.

The profits and losses may be distributed annually, semi-annually or quarterly, to the shares then existing, but shall be distributed at least once in each year, and whenever a new series of shares is to be issued. Profits and losses shall be distributed to the various shares existing at the times of such distribution, in proportion to their value at that time, and shall be computed upon the basis of a single share fully paid up to the date of distribution. Losses shall be apportioned immediately after their occurrence.

Guarantee
fund to be
reserved from
profits.

At each periodical distribution of profits the directors shall reserve as a guaranty fund a sum not less than one nor more than five per cent. of the net profits accruing since the next preceding adjustment, until such fund amounts to five per cent. of the dues capital, which fund shall thereafter be maintained and held; and said fund shall be at all times available to meet losses in the business of the corporation from depreciation of its securities or otherwise.

Corporation
may buy and
sell real
estate.

Any such corporation may purchase at any sale, public or private, any real estate upon which it may have a mortgage, judgment, lien or other incumbrance, or in which it may have an interest; and may sell, convey, lease or mortgage, at pleasure, the real estate so purchased to any person or persons whatsoever. All real estate so acquired shall be sold within five years from the acquisition of the title thereto.

The commissioners of savings banks shall perform, in reference to every such corporation, the same duties, and shall have the same powers, as are required of or given to them in reference to savings banks, and shall annually make report to the general court of such facts and statements respecting such associations, and in such forms as they deem that the public interest requires. Every officer of such corporation shall answer truly all inquiries made, and shall make all returns required by the commissioners.

Every co-operative bank shall annually within twenty days after the last business day of October make a return to the commissioners of savings banks in such form as may be prescribed by them, showing accurately the condition thereof at close of business on said day, which return shall be signed and sworn to by the secretary and treasurer of such corporation. The president and five or more of the directors shall certify and make oath that the report is correct according to their best knowledge and belief.

STATUTES RELATING TO FOREIGN ASSOCIATIONS.

Except as is hereinafter provided, no person, association or corporation shall carry on the business of accumulating the savings of its members and loaning to them such accumulations in the manner of a co-operative bank within this Commonwealth, unless incorporated under the laws thereof for such purpose.

The board of commissioners of savings banks may authorize any such association or corporation duly established under the laws of another State to carry on such business in the Commonwealth; but said association or corporation shall not transact such business in this Commonwealth unless it shall first deposit with the treasurer of the Commonwealth the sum of twenty-five thousand dollars, and thereafter a sum equal to fifteen per cent. of the deposits made in such association or corporation by citizens of the Commonwealth, the amount of percentage of deposits so required to be determined from time to time by said board of commissioners of savings banks; or, in lieu thereof, the whole or any part of said sum may consist of any of the securities named in the first, second and third clauses of section twenty of chapter one hundred and sixteen of the Public Statutes and acts amendatory thereof at their par value, and the said deposit shall be held in trust by said treasurer for the protection and indemnity of the residents of the Commonwealth with whom such associations or corporations respectively have done or may transact business. Said moneys or property shall be paid out or disposed of only on the order of some court of competent jurisdiction

Powers of savings bank commissioners.

Restrictions under Massachusetts laws.

Foreign corporations must be authorized to do business by Massachusetts authorities.

Examina-
tions provided
for.

made on due notice to the attorney-general of the Commonwealth, and upon such notice to the creditors and shareholders of such association or corporation as the court shall prescribe. For the purpose of ascertaining the business and financial condition of any such association or corporation doing or desiring to do such business, said board may make examinations of such associations or corporations at such times and at such places as said board may desire, the expense of such examinations being paid by the association or corporation examined, and may also require returns to be made to them in such form and at such times as they may elect. Whenever, upon examination or otherwise, it is the opinion of said board that any such association or corporation is transacting business in such manner as to be hazardous to the public, or its condition is such as to render further proceedings by it hazardous to the public, said board shall revoke or suspend the authority given to said association or corporation, but this section shall not prevent such a bank or institution, incorporated under the laws of another State, from loaning money upon mortgages of real estate located within the Commonwealth.

Every such person, association or corporation transacting business in the Commonwealth at the time of the passage of this act shall, within sixty days after such passage, conform to the requirements of this act.

Penalty.

Whoever violates any provision of the preceding sections shall be punished by a fine not exceeding one thousand dollars; and any provision thereof may, on petition, be enforced by injunction issued by a justice of the supreme judicial court, or of the superior court.

NEW YORK.

The following is the latest statute in reference to the organization and management of building and loan associations, having become a law May 15, 1894:

Fifteen
persons may
form. Title.

Any fifteen or more persons, of full age and residents of the State of New York, may form an association as provided in this act. All associations formed under the provisions hereof shall be known as co-operative savings and loan associations; and the name of every association so formed shall contain as a part thereof the words "co-operative savings and loan association."

Objects and
purposes.

The object and purpose of such associations shall be to encourage industry, frugality, home-building and savings among its members; the accumulation of savings, the loan-

ing of such accumulations to its members and the repayment to each member of his savings when they have accumulated to a certain sum, or at any time when he shall desire the same, or the association shall desire to repay the same.

Said association shall become incorporated by the said fifteen or more persons making, signing and acknowledging, in the manner and form prescribed for the acknowledgment of deeds in this State, a certificate, wherein shall be stated the name of said association; that the association is formed under and for the purpose prescribed in this act; the town, village or city where the association is located within this State. When made as aforesaid, said certificate shall be filed and recorded in the office of the superintendent of banks; and upon said certificate being so filed and recorded, the superintendent of banks shall, upon the payment of a fee of one dollar therefor, issue a certificate, in proper and suitable form, declaring the facts contained in said original certificate, and the filing and recording thereof in his office, and which latter certificate shall thereupon be recorded in the county clerk's office of the county where said association is located; and upon the same being so recorded, the persons named in the certificate first above mentioned, their associates and successors, shall become a corporate body, with power to adopt by-laws relating to the manner of conducting their business not inconsistent with the provisions of this act. A copy of which by-laws and all subsequent amendments thereof shall be filed with the superintendent of banks within thirty days of their adoption.

The officers of the association shall consist of a board of directors of not less than thirteen members, including therein a president, vice-president, secretary and treasurer. Said last named officers shall be elected annually by the shareholders or by and from the board of directors, and the other members of the board, or not less than one-third thereof, shall be elected annually, as the by-laws shall determine. Other officers may be authorized by the by-laws, subject to the restrictions hereinafter contained. The duties and compensation of the officers, their terms of office, the time of their election, the manner of filling vacancies, the time of the periodical meetings of the officers and shareholders, the manner of calling special meetings and the manner of voting, shall be determined by the by-laws, except that the board of directors shall fix each year the compensation of the secretary and treasurer, unless otherwise determined by the by-laws; and provided, further, that no officer, agent or other person shall receive compensation by salary, fees, expenses or otherwise for soliciting the sale of shares of the association to any person

Method of
incorpora-
tion.

Certificate
and by-laws
to be filed.

Election and
terms of
officers.

Compensation
of officers.
Restriction on
agents.

or persons. All officers named in this act shall hold office until their successors are duly elected and assume the duties of their offices. No association shall expire from neglect to elect officers at the time prescribed in its by-laws.

Shares, value,
free and
pledged.

The capital of said association shall consist of the accumulated savings of its members which it holds, and shall be divided into shares of a matured value of not less than fifty dollars, nor more than two hundred and fifty dollars, as shall be fixed by the by-laws. The shares shall be issued in series, or at any time, as the by-laws shall determine. No shares of a prior series shall be issued after the issuing of shares in a new series when issued upon the serial plan, except additional shares to a borrowing member to complete a loan. Shares which have not been pledged as a security for the payment of a loan shall be called "free shares." Shares that have been so pledged shall be called "pledged shares." Each association shall determine by its by-laws the number of shares that may be held by one person.

Dues, how
paid.

Regular payments made to the association upon shares shall be called "dues." At or before each stated meeting of the board of directors, or at any stated meeting for receiving dues, each shareholder shall pay to the board, or a committee thereof, or some officer of the association, as designated by the by-laws, upon each share held by him, such amount of dues as the by-laws require until the share of stock reaches its matured value, or is withdrawn, canceled or forfeited. Payment of dues on shares in each series shall commence from the time that shares began to be issued in such series, when issued upon the serial plan, and, when not issued in series, from the date of issuing. The association shall have the power to impose and collect a fine from each shareholder for every neglect or refusal to make his payment of dues, interest or premiums when due, in such sums and in such manner as its by-laws determine. The association shall also have power to charge an entrance fee upon each share issued, not exceeding twenty-five cents on each share, or, in lieu thereof, a membership fee not exceeding one dollar. Payments of dues, interest or premium may be made in advance, but no association shall allow interest on such advance payments at a greater rate than six per centum per annum, nor for a longer period than one year.

Fines,
entrance fees,
premium
and interest.

Withdrawals,
notice of.

The accumulations upon free shares may be withdrawn, and the shares canceled, after one month's written notice of such intention, filed with the secretary at or before a stated meeting of the board, but the directors may waive such one month's notice. If filed before such meeting the

one month's notice shall not be deemed to have commenced until the first regular meeting after the filing. The withdrawing shareholder shall be paid the amount of the withdrawal value of his accumulations, as determined under the by-laws, at the last distribution of profits before the notice of withdrawal, together with all dues paid since such distribution, and with or without such interest on the value of the shares at the time of the last distribution, and on the dues thereafter paid, as the by-laws shall determine, less any fines unpaid and a proportionate share of any unadjusted loss; provided, that at no time shall more than one-half the receipts of the association, and when the association is indebted upon matured shares no more than one-third, shall be applicable to the payment of withdrawing shareholders, without the consent of the board of directors, and when the demands of the withdrawing shareholders exceed the money applicable to their payment, they shall be paid in the order in which their notices of withdrawal were filed with the secretary. The board of directors may, at their discretion, under rules made by them, retire the free shares at any time after four years from the date of their issue, by enforcing withdrawals of the same; *provided*, that the shareholders, whose shares are to be retired, shall be determined by lot, and that they shall be paid the full value of their shares, less all fines and proportionate part of any unadjusted loss.

Amount to be paid.

Directors may retire shares.

When each free share reaches its matured value all payments of dues thereon shall cease, and the holder thereof shall be paid out of the funds of the association, the matured value thereof with such rate of interest as shall be determined by the by-laws, from the time the board of directors shall declare such shares to have matured until paid; but at no time shall more than one-third of the receipts of the association be applicable to the payment of matured shares, without the consent of the board of directors. The order of payment of the matured shares shall be determined by the by-laws.

Matured shares, funds for and order of payment.

At each stated meeting of the board or a committee thereof, or other meeting, as fixed by the by-laws for the purpose of making loans, they shall offer to members of the association desiring to borrow all accumulations applicable to that purpose; the same shall be loaned in sums corresponding with the value of a matured share, or a multiple thereof, or the fractional part thereof. If there shall be more than one member desiring to borrow, the right to a loan shall be determined by the open bidding of a premium upon one of the three plans following, which each association shall determine for itself by its by-laws, namely:

Loans and premiums.

The gross premium plan.

1. The "gross plan," with or without "rebates," as the by-laws shall determine; that is, the premium shall be bid in the form of a certain sum per share, which shall be paid in cash or deducted from the loan made to the successful bidder.

The installment premium plan.

2. The "installment plan;" that is, the premium shall be bid in the form of a certain sum per share, which the successful bidder will pay at each regular payment of interest, in addition to the interest which the association requires during the continuance of his loan.

The premium interest plan.

3. The "premium interest plan;" that is, the premium shall be bid in the form of the rate of interest the successful bidder will pay upon his loan during the continuance thereof; the association in this plan shall determine the minimum rate of interest at which the bidding shall begin. But such minimum rate shall not exceed the legal rate of interest.

Highest bidder entitled to loan.

In all these plans the member bidding the highest premium shall be entitled to the loan upon giving the security required therefor, including the interest and premium; the interest and premiums shall be payable from the date of bidding off the loan, unless otherwise ordered by the by-laws, and in case the sale takes place at an adjourned or special meeting, the same shall be payable from the last preceding regular meeting for the loaning of money unless the by-laws otherwise provide. Requiring and receiving such interest and premiums or any other moneys which the association may require under the provisions of this act, shall not be deemed a violation of the usury law. No member or members shall borrow a larger sum than shall be equal to the matured value of the shares held by him or them, nor shall the association take security upon real estate located more than fifty miles from their principal office for the transaction of their business. A borrowing member, for each share or fractional part thereof borrowed upon, shall in addition to the dues on his shares pay interest and premium, if any, on his loan at such times as the by-laws shall prescribe, until the shares borrowed upon shall reach their matured value or the loan is repaid; and when such matured value is reached the shares shall cancel the loan upon them and the proper surrenders and acquittances be made.

Location of real estate security.

Loans on real estate.

For every loan made a bond secured by a first mortgage on real estate, or a second mortgage, when the first mortgage was given to and is held by the association, or when said second mortgage is given in a sum sufficient to cover any first mortgage that may be a lien on the property in addition to the sum advanced by the association, shall be given, accompanied by a transfer and pledge to the associa-

tion of the shares borrowed upon and all accumulations that have or shall accrue thereon, as collateral security for the repayment of the loan; or, in lieu of the mortgage, the borrower, or another, may transfer and pledge to the association for the payment of the loan, free shares, the withdrawal value of which under the by-laws at the time of such borrowing, shall exceed the amount borrowed and interest thereon for six months, and all fines that could accrue in case the borrower should default in the payment of the dues upon the shares borrowed upon, but an association may provide by its by-laws that it will not make stock loans. If the borrower neglects to offer security satisfactory to the board of directors, within the time provided by the by-laws, his right to the loan shall be forfeited and he shall be charged with interest and premium, if any, for one month, and all necessary expenses incurred, if any, under the by-laws in reference to the proposed loan. All bonds and mortgages given to the association shall be deemed conditioned upon the performance of the provisions of this act relating to the payment of loans, premiums, interest and fines thereon, and the by-laws of the association. although the same may not be fully expressed therein. A borrower may repay a loan, and all arrears of interest, premium, if any, and fines thereon (or one or more shares thereof) at any stated meeting or at any time (but the by-laws may otherwise provide); when not made at a stated meeting, he shall pay interest up to the first stated meeting after such payment, or he may, by a proper notice, and directions as to the application, have the withdrawal or holding value of the shares borrowed upon, applied in payment or part payment, as the by-laws shall determine. Should there at any time be money in the treasury not called for by the borrowing or withdrawing members, the board of directors may make temporary loans to members out of the same, at such rate of interest not exceeding six per cent., and under such provisions and restrictions as the by-laws may prescribe. Such temporary loans shall not run more than ninety days and shall be secured by the personal note of the borrower, and also by a pledge of shares to the association, the withdrawal value of which shares shall be at least ten per centum more than the amount of the loan and the interest thereon to its maturity.

Loans on
shares.

Repayment of
loans.

Temporary
loans of
money not
called for.

Whenever any member shall be six months in arrears in the payment of his dues upon free shares, the secretary shall give him notice thereof in writing, and a statement of his arrearages by mailing the same to him at the last post-office address given by him to the association, and if he shall not pay the same within two months thereafter, the

Arrears of
dues on un-
pledged
shares.

board of directors may, at their option, declare his shares forfeited; and at the time of such forfeiture the withdrawal value thereof shall be determined and stated, and the defaulting member shall be entitled to withdraw the same without interest within one year upon such notice as shall be required of a withdrawing shareholder, and upon failure to so withdraw the same, then, and in that case, it may revert to the association.

Arrears of
dues, interest,
or premium.

Whenever a borrowing shareholder shall be in arrears in the payment of his dues, interest or premium two months, the whole loan shall become due at the option of the board of directors, and they may proceed to enforce collection upon the securities held by the association. The withdrawal value at the time of the commencement of the action of all shares pledged as collateral security for the loan, shall be applied upon the loan and arrearages of interest, premium and fines thereon, and the shares deemed surrendered to the association.

May purchase
incumbrances,
etc.

Any association may purchase at any sale, public or private, any real property upon which it may have a mortgage, judgment-lien or other incumbrance, or in which it may have an interest; and may sell, convey, lease or mortgage the same at pleasure to any person or persons; it may also hold and own real estate for the purpose of occupying the same with its own business office.

Associations
may borrow a
limited
amount of
money or loan
to another
association.

Any association organized in pursuance of the provisions of this act may borrow money for the purpose of making loans or paying withdrawals, not exceeding, however, two thousand dollars, so long as its accumulated capital shall not exceed twenty thousand dollars, and when its accumulated capital exceeds that sum, not exceeding ten per cent. thereof. No money borrowed shall be for a longer term than one year. Any association having a surplus in its treasury for which there is no demand for loans, withdrawing stockholders, matured or paid-up stock, may loan the same to another association, organized under the provisions of this act, subject to the provisions of this section, on the part of the borrowing association. No association shall borrow or make loans in this section authorized, except by a majority vote of all the members of its board of directors, the vote to be recorded by ayes and nays in its regular minutes.

Distribution
of profits or
losses.

Profits and losses shall be ascertained at least annually, and shall be distributed to all shares outstanding at the time of such distribution, in the manner provided by the by-laws of the association. At each periodical distribution of profits, the board of directors may reserve and carry as undivided profits, in the nature of a contingent fund, any sum from the net profits that in their discretion seems wise.

No transfers of shares shall be binding upon the association until the same have been made upon the books of the association; and the transferee thereof shall take the same charged with all the liabilities and conditions attaching thereto in the hands of the one transferring the same. The association may require a "transfer fee," not exceeding twenty-five cents per share, or in lieu thereof a total fee not exceeding one dollar on each transfer.

Transfer of shares.

The board of directors shall have the power to appoint and remove, at pleasure, an attorney-at-law for the association. The by-laws of the association may provide for the election of auditors, and prescribe their duties and compensation, and shall provide in what manner the by-laws themselves may be amended. At the time of the adoption of by-laws on the formation of an association, only those members who have joined in the certificate of corporation are entitled to vote, and each incorporator shall have only one vote.

Attorneys and auditors.

Any person of full age and sound mind may become a member of the association by taking one or more shares therein and subscribing to the by-laws, and annexing to his signature his post-office address; and whenever he desires his post-office address changed he shall give written notice thereof to the secretary of the association; and for the purpose of giving any member notice, by mail, the last post-office address given by him shall be deemed the proper one. A minor may hold shares in the name of a parent, guardian or next friend, as trustee for him, but the association itself shall not be responsible to said infant for any moneys received by said trustees on account of said shares from the association. All accumulations upon shares in said association held by any person shall be exempt from execution and proceedings supplementary thereto to the amount of six hundred dollars; and the association itself shall be deemed an institution for savings, and not taxable under any tax law which shall exempt savings banks or institutions for savings from taxation, and shall not be subject to the provisions of chapter one hundred and forty-three of the laws of eighteen hundred and eighty-six, nor shall any law passed hereafter, taxing corporations in any form, be deemed to include associations formed under this act, unless they are specifically named in such law.

Who may become shareholders.

Minor's shares.

Exemption from taxation.

Every such association shall, annually, on or before the thirtieth day of January, make a full report, in writing, of the affairs and condition of such corporation on the thirty-first day of December of the next preceding year to the superintendent of banks, in such form and by such officers of the corporation as the said superintendent may designate. Every payment made to an officer or agent of the

To report annually to the Superintendent of Banks.

Supplemen-
tary reports.

Penalty for
failure to
report.

Visitation and
examination
when neces-
sary.

association, by authority of the association, or by virtue of any provision of its by-laws or articles of association, shall, for the purposes of this section, be deemed a payment to the association and accounted for by it. Such report shall be verified by the oath of the officers making the same, and shall include the receipts of such association from all sources, including membership or share fees, and all other compensation paid to officers or agents by members or persons expecting to become members. Such report shall also include all expenditures made by such association, and for what purpose expended. Every association shall make any further reports which said superintendent of banks shall require, and in such form and as to such matters relating to the condition and conducting of the business of the association as such superintendent shall designate. Any willful and false swearing in making and verifying any such report shall be deemed perjury.

If any such association shall fail to furnish to the superintendent of banks any report required by this act at the time so required, it shall forfeit the sum of ten dollars per day for every day such report shall be delayed or withheld; and the superintendent of banks may maintain an action in his name of office to recover such penalty, and the same shall be paid into the treasury of the State and applied to the expense of the said department, or report the facts to the attorney-general, who may bring an action for recovery in the name of the people of the State of New York; provided, however, that the superintendent may, for good cause shown, extend the time within which such report is to be filed not exceeding twenty days. He shall also annually publish a full report of the condition of all associations formed under the provisions of this act, or under the provisions of any act repealed by this act.

All associations organized under the provisions of this act or under previous acts shall at all times be subject to visitation and examination by the superintendent of banks, his deputies or duly authorized agents; and he shall examine each of said associations at least once in each year. It shall also be the duty of said superintendent, by himself, his deputies or duly authorized agents to make examination of the affairs of any of said associations whenever, in the judgment or discretion of said superintendent, the annual or any other report made to said department as required in this act shall in any manner indicate or reveal that its business is being conducted in a manner not authorized by its articles of association or by-laws, or by the laws of the State of New York under which it is organized or in an irregular or unsafe manner; and when any association

shall fail wholly to make the reports required by the provisions of this act, all expenses incurred in making such examination or investigation herein authorized shall be paid from the funds provided by section twenty-five of this act, except the annual examination herein provided for and also excepting examinations made by reason of the business being conducted in a manner not authorized by articles of association or in violation of law, or in an irregular or unsafe manner as hereinbefore provided; but no charge shall be made therefor when the examination is made by said superintendent personally, or by one of the salaried employes of his department, except for traveling or other necessary expenses, but when made by some person duly appointed by said superintendent other than a salaried officer of his department, the amount charged shall not exceed the sum of ten dollars per day for the time actually expended in making the examination and reports of same, and in getting to and from place of examination and the actual necessary expenses incurred.

Expense of
visitation.

Each association shall at least annually publish and deliver to each shareholder on application a complete and detailed statement of the financial situation and the business conducted since the issuing of its last prior statement.

Publication
of annual
report.

(Previous acts repealed, except as to associations now organized under either of said acts, but such associations shall be subject to the provisions of sections one hundred and eighty-eight, one hundred and eighty-nine, one hundred and ninety and one hundred and ninety-four of this article.)

Previous acts
repealed.

Any association now existing and heretofore incorporated under previous acts may become entitled to the benefits of this act and reincorporate under the provisions in the following manner: First. Upon a majority vote of all the directors so requesting, the president and secretary of the association shall call a special meeting of the shareholders to consider and determine the question whether the association shall reincorporate under the provisions of this act. Such notice shall specify the object of such meeting, and be mailed, postage prepaid, not less than thirty days prior to the date fixed for the meeting, to every shareholder at his last post-office address known to the association. Second. At such meeting a majority vote of those in attendance shall decide all questions considered at the meeting, the vote being by member or by shares, according to the rule already existing in the association. The meeting may be adjourned from time to time if deemed advisable. Third. If the shareholders decide not to reincorporate, another meeting for such purpose shall not be called until one year has passed. Fourth. If the shareholders decide to reincorporate, they

Associations
existing
under former
laws may rein-
corporate.

Special
meeting must
be held.

Re-incorporation proceedings.

shall proceed to adopt by-laws for the association when reincorporated, the voting thereon to be the same as provided in the foregoing subdivision two, and such by-laws shall be in conformity with the provisions of this act. Fifth. The shareholders having decided to reincorporate, and having adopted by-laws, shall next designate the fifteen or more persons who may make and file the certificate, and have the certificate recorded as provided in the third section of this act. Sixth. Upon the said fifteen or more persons complying with the provisions of said section three, and filing said by-laws with the superintendent of banks, the association shall become fully incorporated under this act. All obligations in favor of the old association at the time of such change shall belong to the new association, and be enforceable by it and in its name as fully and completely as the old association might have enforced them if no change had been made, and all demands, claims and rights of action against the old corporation may be enforced against the new corporation as fully and completely as though no change had been made.

Assessment of associations for expenses of supervision.

Superintendent of banks is hereby empowered to levy an assessment upon each association incorporated hereunder or under previous laws for the purpose of defraying the necessary expenses of his department in the supervision of said associations, examination and publication of reports as follows, viz.: Said assessment shall be levied upon said associations in proportion to their assets as shown by the last preceding annual report, and said associations shall pay the same within ten days after notice is given by said superintendent; and in no event shall any portion of said expense be borne by the State.

OHIO.

Domestic and foreign associations.

Be it enacted by the General Assembly of the State of Ohio, that a corporation for the purpose of raising money to be loaned among its members shall be known in this act as a building and loan association. Associations organized under the laws of this State shall be known in this act as "domestic" associations, and those organized under the laws of other States or territories as "foreign" associations. Associations may be organized and conducted under the general laws of Ohio relating to corporations, except as otherwise provided in this act.

Organization.

The capital stock named in the article of incorporation shall be deemed to refer to the authorized capital, and the organization may be completed and business commenced

when five per cent. thereof is subscribed. Directors may be elected for any term not less than one year nor longer than three years; but if such term be longer than one year, it shall be so arranged that the term of office of an equal number of directors, as nearly as may be, will expire each year.

Such corporation shall have power to receive money on deposit from time to time to the extent necessary to meet the demands made on it by its members and depositors, but shall not pay interest thereon exceeding the legal rate. To issue stock to members on such terms and conditions as the constitution and by-laws may provide; but no person shall vote more than twenty shares in any such corporation in his own right. To assess and collect from members and depositors such dues, fines, interest and premium on loans made or other assessments, as may be provided for in the constitution and by-laws. Such dues, fines, premiums or other assessments shall not be deemed usury, although in excess of the legal rate of interest. To permit members to withdraw all or part of their stock deposits at such times and upon such terms as the constitution and by-laws may provide. Any member, however, who withdraws his entire stock, or whose stock has matured, shall be entitled to receive all dues paid in and dividends declared, less all fines or other assessments, and less a pro rata share of all losses, if any have occurred. To cancel shares of stock upon which all payments have been withdrawn, or upon which loans have been cancelled, and reissue them as new stock. To issue stock to minors and permit the same to be withdrawn as other stock, and the receipt of such minor shall be a valid acquittance, if his rights have been fully secured him. To acquire, hold, encumber and convey such real estate and personal property as may be necessary to enforce or protect its securities. To borrow money, not exceeding twenty per cent. of the assets, and issue its evidences of indebtedness therefor. To make loans to members and depositors on such terms, conditions and securities as may be provided in the constitution and by-laws. To cancel such loans and release the securities on such terms as the board of directors may provide. But any member may have his loan cancelled upon the following terms, to wit: After the premium for one year has been paid, and also the interest and premium up to the date of cancellation, the borrower shall pay the sum actually borrowed, less the dues paid and dividends credited. He shall pay also any fines or other assessments required by the constitution or by-laws. To accumulate from the earnings and invest as the board of directors may determine a reserve fund for the payment of contingent

Powers.

Not to be
deemed
usurious.

To borrow
money.

Reserve fund.

To increase or
decrease
capital.

losses. To make such annual or semi-annual distribution of the earnings (after paying expenses and setting aside a sum for the reserve fund as hereinafter provided) as the constitution and by-laws may prescribe. To increase or decrease its authorized capital or the face value of its shares at any time by a majority vote of its board of directors; and a certificate of such action shall be made by the president and secretary, and duly filed with the secretary of state. To dissolve the corporation when its continuance shall be deemed, by a majority vote of its members, to be no longer desirable, subject, however, to the vested rights of members. To provide, by constitution adopted by its members, and by-laws adopted by its board of directors, for the proper exercise of the powers herein granted, and the conduct and management of its affairs. All such other powers as are necessary and proper to enable such corporation to carry out the purpose of its organization.

Bond of
officers and
details of
management.

The board of directors shall designate a bank or banks in which the treasurer shall deposit all funds in the name of such corporation. Such funds can then be withdrawn only by check, signed by the president and financial secretary, or such other officers as the board of directors may designate. The treasurer's bank book shall be open to the inspection of any director at any time. No president or secretary or other officer shall sign any check unless the expenditure has been authorized by the board of directors. All officers of such association who have charge or possession of money, securities or property, shall give bond before entering upon their duties to the satisfaction of the board of directors for the faithful performance of the same, and the safe keeping and proper application of all moneys or property coming into their hands. All officers of such corporations on being re-elected to office shall renew their bonds. The bond may be increased or additional sureties required at any time by the board of directors. Directors shall not be eligible as bondsmen, and shall be individually liable for any loss of members caused by their neglect to comply with the provisions of this section.

Contingent
fund of five
per cent. of
loans.

The amount to be set aside to the fund for contingent losses shall be determined by the board of directors, but in all permanent or perpetual associations at least five per cent. of the net earnings shall be set aside each year to such fund until it reaches at least five per cent. of the outstanding loans. All losses shall be paid out of such fund until the same is exhausted, and whenever the amount in said fund falls below five per cent. of the loans as aforesaid, it shall be replenished by annual appropriations of at least five per

cent. of the net earnings as hereinbefore provided until it again reaches said amount.

All expenses of such associations shall be paid out of the earnings only, and so much of the earnings as may be necessary shall be set aside each year for such purpose. But charges incident to a loan, if paid by the borrower, shall not be deemed a part of the current expenses. A portion of the earnings, to be determined by the board of directors, shall also be reserved annually or semi-annually for the payment of contingent losses, as provided in section five of this act, and the residue of such earnings shall be transferred as a dividend annually or semi-annually, in such proportion to the credit of all members as the corporation, by its constitution and by-laws, may provide, to be paid to them at such times and in such manner in conformity with this act as the corporation, by its constitution and by-laws, may provide. All losses shall be assessed in the same proportion and manner on all members after the amount in the reserve fund has been applied to the payment of the same.

Division of earnings or assessment of losses.

The shares and loans advanced to its members shall be exempt from taxation, except shares or stock upon which no loans have been made or money advanced by the company shall be considered and held as credits, and the said members individually shall list for taxation the number of shares held by them, and the true value thereof in money, on the day preceding the second Monday in April in each year, and the same shall be assessed at such valuation for taxation and taxes as other property.

Taxation of shares.

There is hereby established in the department of insurance a bureau to be known as the bureau of building and loan associations, which shall be charged with the execution of the laws of this State relating to building and loan associations.

Inspection.

The chief officer of said bureau shall be known as the inspector of building and loan associations; the superintendent of insurance shall, *ex officio*, be also the inspector of building and loan associations, and as compensation for his services as such inspector he shall be entitled to receive the sum of one thousand dollars per annum. Before entering upon his duties he shall give bond to the State of Ohio in the sum of ten thousand dollars, to be approved by the governor, conditioned for the faithful discharge of his duties, and the bond, with his oath of office and the approval of the governor indorsed thereon, shall be filed with the secretary of state.

Inspector, bond and term of office.

The inspector may appoint a deputy, who shall be authorized to perform the duties attached by law to the office of inspector, during his absence or disability, and shall receive

Deputy inspectors.

a salary of eighteen hundred dollars per year. He shall also appoint such other clerks or examiners as may be provided for by law.

To enforce laws.

It shall be the duty of the inspector to see that all the laws of this State relating to building and loan associations are faithfully executed.

Regulation of foreign associations.

Foreign building and loan associations doing business in this State, shall conduct the same in accordance with the laws of the State governing domestic associations, and no such association shall do any business in this State until it procures from the inspector a certificate of authority to do so. To procure such authority such association shall comply with the following provisions:

Must deposit \$100,000.

First. It shall deposit with the inspector, one hundred thousand dollars, either in cash or bonds of the United States or the State of Ohio, or of any county or municipal corporation in the State of Ohio satisfactory to the inspector.

Annual statements.

Second. It shall file with the inspector a certified copy of its charter, constitution and by-laws, and other rules and regulations showing its manner of conducting business, together with a statement such as is required annually from all associations.

Legal service on.

Third. It shall also file with the inspector a written instrument duly executed, agreeing that a summons may issue against it from any county in this State directed to the sheriff of the county in which the office of inspector is situate, commanding him to serve the same by certified copy personally upon the inspector or by leaving a copy thereof at his office. The inspector shall, however, mail a copy of any papers served on him, postage prepaid, to the home office of such association.

Certificate to be issued.

Whenever such association has complied with the provisions of this act, and the inspector is satisfied that such association is doing business according to the laws of this State, and is in sound financial condition, he shall issue his certificate of authority to such association to do business in this State. Annually thereafter, upon the filing of the annual statement herein provided for, if the inspector shall be satisfied as aforesaid, he shall issue a renewal of such certificate of authority.

Associations may change securities and collect interest.

Such foreign association may collect and use the interest on any securities so deposited, so long as it fulfills its obligations and complies with the provisions of this act. It may also change them for other securities of equal value and satisfactory to the inspector.

Securities liable for claims.

The deposit made with the inspector shall be held as a security for all claims of residents of this State against said association, and shall be liable for all judgments or decrees

thereon, and subjected to the payment of the same in the same manner as the property of other non-residents. Should any association cease to do business in this State, the inspector may release securities in his discretion, retaining sufficient to satisfy all outstanding liabilities.

**Annual
report of
associations.**

Every building and loan association doing business in this State shall, annually, at the end of each fiscal year, or within forty days thereafter, make a full and detailed report in writing of the affairs and business of the association for the preceding year, and showing its financial condition at the end of said fiscal year. With the first report made by any association it shall also file a certified copy of its constitution and by-laws, or other rules and regulations, showing its manner of doing business.

The statement shall be in such form and contain such information as may be prescribed by the inspector of building associations. It shall be sworn to by the secretary, and its correctness attested by at least three directors, or an auditing committee appointed by the board. The original shall be filed with the inspector of building associations within forty days after the close of the fiscal year, and such an abstract thereof as the inspector may require shall be posted for sixty days in the office or meeting place of such association, and also published in some paper regularly issued in the county in which said association is located.

**What to
contain and
when to be
filed.**

The inspector, when he has reason to suspect the correctness of any statement of an association doing business in this State, or that its affairs are in an unsound condition, or that it is not conducting its business in accordance with law, may make or cause to be made by some person by him appointed for that purpose, an examination into the affairs of such association. The expense of all examinations shall be paid by the associations examined, except that the actual expenses of the examination of an association organized under the laws of this State, shall be paid out of the fees paid by such associations to the inspector as hereinbefore provided.

**Examination
of associa-
tions by
inspectors.**

Should the inspector, upon examination, find any domestic association conducting its business in whole or in part contrary to law, or failing to comply with the law, he shall so notify the board of directors of such association in writing, and if after thirty days, such illegal practices or failure continue, he shall communicate the facts to the attorney-general, who shall cause proceedings to be instituted in the proper court to revoke the charter of such association.

**Illegal
practices.
Duty when
discovered.**

Should the inspector find, upon examination, that the affairs of any such association are in an unsound condition, and that the interests of the public demand the dissolution

**When in
unsound
condition.
Duty of
inspector.**

of such association, and the winding up of its business, he shall so report to the attorney-general, who shall institute the proper proceedings for that purpose.

Powers of examiners.

Such examiners shall have access to and may compel the production of all the books, papers, securities and moneys, etc., of the association under examination. They shall have power to administer oaths to, and examine the officers and agents of such associations as to the affairs.

Inspector may publish result.

When the inspector deems it to the interest of the public, he may publish the result of such examination in some newspaper of general circulation in the county in which such association is located, if it be in a domestic association, and in some newspaper in the city of Columbus, Ohio, if it be in a foreign association.

May cancel authority of foreign associations.

Should the inspector find, upon examination, that any foreign association does not conduct its business in accordance with the law, or that the affairs of any such association are in an unsound condition, or if such association refuses to permit examination to be made, he may cancel the authority of such association to do business in this State, and cause a notice thereof to be mailed to the home office of the association, and to be published in at least one newspaper in the city of Columbus. After the publication of such notice, it shall be unlawful for any agent of said association to receive any further stock deposits from members residing in this state, except payments on stock on which a loan has been taken.

Fees to be paid by foreign associations.

Foreign building and loan associations shall pay to the inspector the following fees, which shall be paid into the state treasury, to wit: For filing each application for admission to do business in this State, \$100.00. For each certificate of authority and annual renewal of same, \$50.00: both foreign and domestic associations shall pay to the inspector for filing each annual statement as follows: If the assets of the association, as shown by the statement filed, amount to \$50,000 00 or less, \$3.00; if more than \$50,000.00 and less than \$100,000.00, \$5.00; if more than \$100,000.00 and less than \$250,000.00, \$10.00; if more than \$250,000.00 and less than \$500,000.00, \$20.00; if more than \$500,000.00 and less than \$1,000,000.00, \$30.00; and if more than \$1,000,000.00, \$50.00. For each copy of a paper filed in his office, twenty-five cents per folio. For affixing the seal of the office and certifying to paper, \$1.00. Provided, however, that the inspector may retain from the fees so received by him up to the close of the fiscal year ending Nov. 15, 1892, a sum sufficient to pay the salaries and necessary expenses of the bureau of building and loan associa-

tions up to said time, which sum is hereby appropriated for that purpose.

All securities of cash deposited with the inspector shall be immediately deposited with the treasurer of State, who, with his sureties, shall be responsible for the safe keeping thereof. The treasurer shall deliver such securities only upon the written order of the inspector of building associations.

Securities to be deposited in State treasury.

It shall be unlawful for any building and loan association to do business in this State without having first complied with the provisions of this act, and any association violating any of the provisions, shall be fined not less than fifty nor more than one thousand dollars, to be recovered by an action in the name of the State, and on collection paid into the State treasury; provided, that building and loan associations organized in other States, having heretofore transacted business in this State, which shall not have complied with the provisions of this act, shall have the right to close up their business, and fulfil their contracts heretofore entered into with citizens of this state, through their duly authorized agents, without being subject to the penalties prescribed by this act.

Penalties against associations.

Every president, director, trustee, member of any committee, secretary, treasurer, attorney or any other officer at any time created, or agent of any such corporation, who embezzles, abstracts or wilfully misapplies any of the moneys, funds or credits of such corporation, or who issues or puts into circulation any warrant or other order, or who assigns, transfers, cancels or delivers up any note, bond, draft, mortgage, judgment, decree, or any other written instrument belonging to such corporation, or raises money otherwise, or receives money from any member or other person for and in the name of such corporation, unless duly authorized by the board of directors of such corporation; or who shall sign the name of any person to any order or warrant for the payment of money without proper power of attorney or written order from such person to whose order such warrant or order is made payable; or any member or members of the board of directors who shall vote to declare, or any financial or first secretary of such corporation who shall declare or advise the board of directors of such corporation to declare a greater dividend than what has been actually earned by the corporation, for the purpose of deceiving the people or defrauding the members of such corporation; or who certifies to or makes any false entry on any book, report, or statement of or to such corporation, with intent in either case to deceive, injure or defraud the corporation or any other company, body politic or corporate,

Penalties against officers, agents, etc.

or any individual person, or to deceive any one appointed to examine the affairs of such corporation; and every person who with like intent aids or abets any president, secretary, treasurer, committee or other officer or person in any violation of this section shall be deemed guilty of felony, and shall be imprisoned not less than one year nor more than ten years, and shall be liable civilly to the party injured, to the extent of such damage thereby incurred, and suit may be brought against such person and the sureties on his bond given to such corporation for the faithful performance of his duty. Any officer whose duty it is, failing to make the reports required by this act, and any officer, employee, or other person, who solicits business for, aids or assists any building and loan association to do business contrary to the provisions of this act, or without having complied with its provisions shall be guilty of a misdemeanor, and on conviction thereof shall be fined not more than five hundred dollars, or imprisoned not more than six months or both. Such fines, when collected, to be paid into the state treasury.

Annual
report of
inspector.

The inspector shall keep and preserve in permanent form a full record of his proceedings, including a concise statement of each association examined, and he shall, annually, make a report to the legislature of the general conduct and condition of the building and loan associations doing business in this State, with such suggestions as he may deem expedient. Such report shall also include the information contained in the statements required of the associations and arranged in tabulated form. He shall also report the names and compensation of the clerks employed by him, the whole amount of the income, the source whence derived, and the expenses in detail, during the year ending on the thirty-first day of December.

PENNSYLVANIA.

Building and
Loan associa-
tions.

Building and loan associations incorporated under the provisions of this act, shall have the powers and from the date of the letters patent creating the same, when not otherwise provided in this act, be governed, managed and controlled as follows:

Powers and
franchises.

They shall have the power and franchise of loaning or advancing to the stockholders thereof the moneys accumulated from time to time, and the power and right to secure the repayment of such moneys, and the performance of the other conditions upon which the loans are to be made, by bond and mortgage or other security, as well as the power and right to purchase or erect houses, and to sell, convey, lease or mortgage the same at pleasure to their stockholders

or others for the benefit of their stockholders, in such manner, also, that the premiums taken by the said associations, for the preference or priority of such loans, shall not be deemed usurious and so, also, that in case of non-payment of installments, premiums or interests by borrowing stockholders, for six months, payment of principal, premiums and interest, without deducting the premiums paid, or interest thereon, may be enforced by proceeding on their securities according to law.

The capital stock of any corporation created for such purposes by virtue of this act, shall at no time consist in the aggregate of more than one million dollars, to be divided into shares of such denomination, not exceeding five hundred dollars each, and in such number as the incorporators may in the application for their charter, specify: *provided*, that the capital stock may be issued in series; but no such series shall at any issue exceed in the aggregate five hundred thousand dollars, the installments on which stock are to be paid at such time and place as the by-laws shall appoint; no periodical payment of such installments to be made exceeding two dollars on each share, and said stock may be paid off and retired as the by-laws shall direct. Every share of stock shall be subject to a lien for the payment of unpaid installments and other charges incurred thereon under the provisions of the charter and by-laws, and the by-laws may prescribe the form and manner of enforcing such lien; new shares of stock may be issued in lieu of the shares withdrawn or forfeited; the stock may be issued in one or in successive series, in such amount as the board of directors or the stockholders may determine; and any stockholder wishing to withdraw from the said corporation, shall have power to do so by giving thirty days' notice of his or her intention to withdraw, when he or she shall be entitled to receive the amount paid in by him or her, less all fines and other charges; but after the expiration of one year from the issuing of the series, such stockholders shall be entitled, in addition thereto, to legal interest thereon; *provided*, that at no time shall more than one-half of the funds in the treasury of the corporation be applicable to the demands of withdrawing stockholders without the consent of the board of directors and that no stockholders shall be entitled to withdraw, whose stock is held in pledge for security. Upon the death of a stockholder, his or her legal representatives shall be entitled to receive the full amount paid in by him or her, and legal interest thereon, first deducting all charges that may be due on the stock. No fines shall be charged to a deceased member's account from

Capital stock.

Amount of series and installments on stock restricted.

Withdrawals.

Relative to officers.	<p>and after his or her decease, unless the legal representatives of such decedent assume the future payments on the stock.</p> <p>That the number, titles, functions and compensation of the officers of any such corporation, their terms of office, the times of their election, as well as the qualification of electors, and the ratio and manner of voting, and the periodical meetings of the said corporation, shall be determined by the by-laws, when not provided by this act.</p>
Premiums on loans.	<p>That the said officers shall hold stated meetings, at which the money in the treasury, if over the amount fixed by the charter as the full value of a share, shall be offered for loan in open meeting and the stockholders who shall bid the highest premium for the preference or priority of the loan, shall be entitled to receive a loan of not more than the amount fixed by charter as the full value of a share for each share of stock held by such stockholder; <i>provided</i>, that a stockholder may borrow such fractional part of the amount fixed by charter as the full value of a share, as the by-laws may provide; good and ample security, as prescribed by the by-laws of the corporation, shall be given by the borrower to secure the repayment of the loan; in case the borrower shall neglect to offer security, or shall offer security that is not approved by the board of directors by such time as the by-laws may prescribe, he or she shall be charged with legal interest, together with any expenses incurred, and the loss in premium, if any, on a re-sale, and the money may be resold at the next stated meeting; in case of non-payment of installments or interest by borrowing stockholders, for the space of six months, payment of principal and interest, without deducting the premium paid or interest thereon, may be enforced by proceeding on their securities according to law.</p>
Re-sales when security is inadequate.	<p>That a borrower may repay a loan at any time, and in case of the repayment thereof, before the expiration of the eighth year after the organization of the corporation, there shall be refunded to such borrower one-eighth of the premium paid for every year of the said eight years then unexpired; <i>provided</i>, when the stock is issued in separate series the time shall be computed from the date of the issuing the series of stock on which the loan was made.</p>
Payment of loans.	<p>That no premiums, fines, or interest on such premiums, that may accrue to the said corporation, according to the provisions of this act, shall be deemed usurious, and the same may be collected as debts of like amount are now by law collected in this Commonwealth.</p>
Not to be deemed usurious.	<p>That no corporation or association created under this act shall cease or expire from neglect on the part of the corporation to elect officers at the time mentioned in their</p>
Officers; failure to elect; term.	

charter or by-laws, and all officers elected by such corporation, shall hold their offices until their successors are duly elected.

Any loan or building association incorporated by or under this act, is hereby authorized and empowered to purchase at any sheriff's or other judicial sale, or at any other sale, public or private, any real estate, upon which such association may have or hold any mortgage, judgment, lien or other incumbrance or ground rent or in which said association may have an interest, and the real estate so purchased, or any other that such association may hold or be entitled to at the passage of this act, to sell, convey, lease, or mortgage at pleasure, to any person or persons whatsoever; and all sales of real estate heretofore made by such association to any person or persons not members of the association so selling are hereby confirmed and made valid.

All such corporations shall have full power to purchase lands and to sell and convey the same, or any part thereof, to their stockholders or others, in fee simple, with or without the reservation of ground rents, but the quantity of land purchased by any one of said associations hereafter incorporated, shall not in the whole, exceed fifty acres, and in all cases the lands shall be disposed of within ten years from the date of the incorporation of such associations respectively.

That all land and building associations are hereby authorized to make sale of and assign or extinguish to any person or persons the ground rents created as aforesaid.

SUPPLEMENT.

That in all elections for directors, managers or trustees of any corporation created under the provisions of this statute, or accepting its provisions, each member or stockholder or other person having a right to vote may cast the whole number of his votes for one candidate, or distribute them upon two or more candidates as he may prefer; that is to say, if the said member or stockholder, or other person having a right to vote, own one share of stock, or has one vote, or is entitled to one vote for each of six directors by virtue thereof, he may give one vote to each of said directors, or six votes for any one thereof, or a less number of votes for any less number of directors, whatever may be the actual number to be elected, and in this manner may distribute or cumulate his votes as he may see fit; all elections for directors or trustees shall be by ballot, and of every share of stock shall entitle the holder thereof to one vote, in person or by proxy, to be exercised as provided in this section.

May purchase, hold and convey real estate in which an interest is held.

Limitations on purchase of land.

Ground rents.

Cumulative voting for managers provided for.

Premiums
may be paid
in install-
ments.

Interest may
be deducted
in advance in
lieu of pre-
miums.

Payments to
withdrawing
stockholders.

Involuntary
withdrawals.

That it shall be lawful for any mutual savings fund, or building and loan association, now incorporated or hereafter to be incorporated, in addition to dues and interest, to charge and receive the premium or bonus bid by a stockholder for preference or priority of right to a loan in periodical installments; and such premium or bonus so paid in installments shall not be deemed usurious, but shall be taken to be a payment as it falls due in contradistinction to a premium charged and paid in advance; and in so far as said premium or bonus so charged and paid, in addition to dues and interest, shall be excess of two dollars for each periodical payment, the same shall be lawful, any law, usage or custom to the contrary notwithstanding. It shall also be lawful for any mutual savings fund or building and loan association to charge and deduct interest in advance, in lieu of premiums for preference or priority of right to loan; *provided*, that the certificate of incorporation of each association hereafter to be incorporated, and the certificate provided in section 9 of this act for those heretofore incorporated, shall set forth whether the premium or bonus bid for the prior right to a loan shall be deducted therefrom in advance or paid in periodical installments, or whether interest in advance shall be deducted from the loan in lieu of premiums or bonus.

Stockholders withdrawing voluntarily shall receive such proportion of the profits of the association, or such rate of interest as may be prescribed by the by-laws, any law or usage to the contrary notwithstanding; but payment of the value of stock so withdrawn shall only be due when the funds, now by law applicable to the demand of withdrawing stockholders, are sufficient to meet and liquidate the same, and then only in the order of the respective times of presentation of the notices of such withdrawals, which must have been presented in writing at a previous stated meeting, and have been then and there endorsed as to times of presentation by the officer designated by the by-laws of the association.

The by-laws may provide for the involuntary withdrawal and cancellation at or before maturity of shares of stock not borrowed on; *provided*, that such withdrawals and cancellations shall be pro rata among the shares of the same series of stock; *and provided further*, that not less than legal interest shall be credited and allowed to each share so withdrawn and cancelled.

A borrower may repay a loan at any time, and in case of the repayment thereof before the maturity of the shares pledged for said loan, there shall be refunded to such borrower (if the premiums, bonus or interest shall have been

deducted in advance) such proportions of the premiums, bonus or advance interest bid, as the by-laws may determine; *provided*, that in no case shall the association retain more than one-hundredth of said premiums or bonus for each calendar month that has expired since the date of the meeting upon which the loan was made, or, if interest in advance, it shall retain only the interest due on the loan up to the time of settlement; *and further provided*, that such borrower shall receive the withdrawing value of the shares pledged for said loan, and the shares shall revert back to the association.

In case of non-payment of installments of stock, premiums, dues or interest by borrowing stockholders for the space of six months, payment of the same, together with the full principal of the loan, may be enforced by proceeding on their securities according to law; and the money so recovered shall be paid into the treasury of the association for such uses (loans or otherwise) as may be deemed proper by the association; and if the said moneys so recovered, together with the withdrawal value of the shares of such defaulting borrower, shall exceed the amount it would have required, according to the preceding section, to have voluntarily repaid the loan, together with all the expenses incurred by the association, such excess shall be repaid to such defaulting borrower.

Fines or penalties for the non-payment of the installment of dues, interest and bonus or premium, shall not exceed two per centum per month on all arrears.

It shall be lawful for any married woman of full age to hold stock in any of said savings funds, building or loan associations; and as such stockholder, she shall have all the rights and privileges of other members, including the right to borrow money from said associations and bid premiums therefor, and shall also have the right and power to secure such loan by transferring her said stock or other securities to said association from which the same was borrowed, or by executing bond and mortgage upon her separate real estate to secure said loan; *provided, however*, that the husband of such married woman join in the execution of such bond or mortgage: and such married woman shall also have the right to sell, assign and transfer her said stock or withdraw the same without joining the husband in such transfer or withdrawal; and it shall be lawful for any such savings fund, building or loan association to collect such loans made to such married woman, including the dues, interest, premium and fines, as loans made by such associations to other members are now by law collected, and such

Premiums or advance interest to be refunded on payment of loan.

Proceedings to enforce payments.

Limitation of fines.

Stock held by married women.

stock or interest in such stock shall not be liable for the debts of any husband of such married woman.

Incorporation, certificate and letters patent.

Mutual savings fund or building and loan associations heretofore incorporated under the provisions of any law shall be entitled to all the privileges, immunities, franchises and powers conferred by this act, and upon filing with the secretary of the Commonwealth a certificate of their acceptance of the same in writing, under the duly authenticated seal of said association, which certificate shall also prescribe their mode or plan of charging premiums, bonus or advance interest, as set forth in the first section of this act; and upon such acceptance and approval thereof by the governor, he shall issue letters patent to said corporation reciting the same.

NEW JERSEY.

Incorporation provided for.

That any number of persons, not less than five, may associate and form an incorporated company for the purpose of assisting each other, and all who may afterwards become associated with them, in acquiring real estate, making improvements thereon and removing incumbrances therefrom, by the payment of periodical installments; and for the further purpose of accumulating a fund to be returned to its members who do not obtain advances, for purposes above mentioned, when the funds of such association shall amount to a certain sum per share, to be specified in the articles of association.

Certificate to be filed. Powers.

Any such persons who shall sign a certificate setting forth that they have formed such an association under the provisions of this act, and the name adopted for such association, and the city, borough or township where it is to be located and its business transacted, and who shall cause the same to be delivered to the clerk of the county which embraces the place of its location, thereupon, together with all who may afterwards become members, their successors and assigns, shall be a body corporate and politic in law, with all the powers mentioned in the first section of the act, entitled "An act concerning corporations."

Record.

The said clerk shall immediately file said certificate and record the same in a book to be kept for that purpose, for which he shall be entitled to receive the sum of twenty-five cents.

Stock of minor children and married women.

Parents and guardians may take and hold shares in such associations in behalf of their minor children or wards, and trustees in behalf of married women, and may act in such associations in behalf of those they represent.

The right of membership in all associations formed under this act shall consist in the periodical payment of such sum of money, at such times and subject to such penalties as shall be determined by the constitution adopted and filed as aforesaid, or in payment of a principal sum specified in such constitution, to be repaid by the company, in such way and manner as shall therein be designated, with interest, not exceeding seven per cent. per annum.

The funds of every association formed under this act shall be invested in the purchase of lands or building lots, and erecting buildings and improvements thereon, or in the purchase of lots and houses already built; which lands, dwellings and improvements shall be sold to the members of such associations, payable in the shares of the company, or in periodical installments for a period such as shall be agreed upon and designated in their constitution, and which shall not exceed the term of twenty years; at the expiration of which term, the lands, dwellings and improvements so sold and conveyed to the members of such associations shall become the property of the grantees, discharged from all further payment and clear of all incumbrance; or in loans to members on mortgage of real or personal estate, payable in shares of said company, or by such periodical installments or in the redemption of shares, or in all or any of these modes.

It shall be lawful for married women and minors to hold shares in any associations formed under this act; *provided*, said shares are paid for out of the earnings of said married women and minor children, or with money given to them by others than the husbands of said married women, or the male parents of minor children.

Every company formed under this act shall adopt a constitution, which shall embrace all the provisions of the foregoing sections, and such articles for their government and management of their business as they shall deem proper; *provided*, the same shall not be inconsistent with this act or with the act concerning corporations aforesaid, and shall not contravene the laws or constitution of this State or the United States, and may alter and amend the same from time to time in the manner therein provided; the investment of every such association shall be made either in loans to or in redemption of the shares of, or in purchasing lots and erecting dwellings for the members, or in all of said modes, or in such other ways as the constitution of the particular association shall provide: and no premium given for priority of loan or acquisition of a building, or discount given on the redemption of shares, shall be deemed to be usurious.

Every company formed under this act shall furnish to

Payments.

Investment of funds.

Shares held by married women and minors.

Constitution and by-laws.

Annual
statements.

the secretary of state, if required, an annual statement of the business and condition of the company, which shall be duly attested, under oath or affirmation, by the proper officers of said company.

Power to sell
property.

Any company formed in pursuance of this act shall have power to dispose of or sell any lands and tenements to others than those constituting the said company, on terms according to or not inconsistent with the constitution of such company; and the purchasers of said tenements so sold or disposed of shall not thereby be constituted members of any such company formed as aforesaid.

Membership.

The original associates, or those formed into companies under this act, or their assigns, and who shall have actually created a fund and expended the same in acquiring lands and tenements, shall be alone deemed to have and to exercise the right of members in said companies.

Deeds of
conveyance.

All deeds of conveyance of lands or tenements granted by any company formed in pursuance of said act shall be held to be valid and binding, with all the restrictive clauses as against nuisances, or what may be deemed nuisances, by the constitutions of any companies so formed as aforesaid, unless the same are in violation of the constitution of this State or the laws thereof, or of the United States.

All matters not herein provided for shall be regulated by the constitution and by-laws of said associations respectively.

May partition
lands to
members.

That companies organized under this act may divide or partition the lands by them owned among their members by lot, in such way as to them may seem most advantageous, and all conveyances made in pursuance of such allotment shall, for all purposes, be valid and effectual.

SUPPLEMENT.

Reorganiza-
tion under
preceding act
provided for.

That any mutual loan, homestead or building association heretofore organized under the laws of this State shall have power to meet and reorganize and provide for the transaction of their future business under the provisions of the act to which this is a supplement, by giving notice thereof by advertisement for four weeks successively, at least once in each week, in a newspaper published or circulating where such company or association is located, which advertisement shall be signed by the secretary, and state the time, place and purpose for which such meeting is called, and also by sending a written or printed notice to each stockholder containing the same information; when so assembled, they shall have power, by a two-thirds vote of the stock present, to change, alter or repeal their present constitution and by-laws, and to adopt such new constitution and by-laws as

they may deem needful for their future government; *provided*, the same do not conflict with the laws or constitution of this State or of the United States.

SUPPLEMENT.

That nothing in the act to which this is a supplement shall be construed to prevent any association formed under the provisions of the said act from taking a premium for priority of loan or acquisition of real estate, or discount on the redemption of shares; and that no premium or discount so taken for such purpose shall be deemed to be usurious.

Premiums not to be considered usurious.

SUPPLEMENT.

That any association which now is or hereafter may become incorporated under the provisions of the act to which this is a further supplement, may issue shares of stock in different series to mature and terminate in such manner as may be designated in and by the constitution or by-laws of such associations or any amendment lawfully made thereto.

Shares issued in series.

That whenever the constitution or by-laws of any such association make no provision for the manner in which the same may be amended, such association may amend its constitution or by-laws at any regular meeting of the association by a vote of two-thirds of its members present at such meeting; *provided*, that the proposed amendment shall have been submitted in writing and entered upon the minutes of said association at least four weeks before a vote shall be taken thereon.

Amendments to constitution and by-laws.

SUPPLEMENT.

Whereas, doubts have arisen as to the legal right of associations formed or incorporated under or by virtue of the above mentioned act and the several supplements thereto, to issue new or a series of shares under their original acts of incorporation; and whereas, a number of said associations have issued new or a series of shares, believing that they had a legal right so to do; now, in order to remove all doubts on the subject, and to legalize the same and the issuing of certificates of stock therefor, and to hereafter authorize the forming of such new series:

Shares issued under previous acts.

Be it enacted, that all new or series of shares heretofore issued by any association formed or incorporated under and by virtue of the act to which this is a supplement, and the several supplements thereto, be and the same are hereby confirmed and made valid both in law and in equity, notwithstanding the issue of said new series may have increased the number of shares of said association beyond the limit fixed in its certificate of incorporation.

Validity of outstanding shares.

Issues of new shares.

That the board of directors of all associations heretofore incorporated or which may be hereafter incorporated under and by virtue of the above named act, and the several supplements thereto, are hereby empowered to authorize the formation of a new or a series of shares upon the same terms and conditions the original shares of stock were issued, whenever at least one hundred shares shall have been subscribed, and to issue certificates of stock for the shares taken in said new series, notwithstanding the issue of said new series may increase the number of shares of said association beyond the limit fixed in its certificate of incorporation.

Each series to be kept distinct.

That whenever a new series has been or shall be formed under this supplement, the relative value of the shares of the respective series shall be kept separate and distinct, and the value thereof reported in an annual statement to the shareholders.

Change of name provided for.

That it shall be lawful for any association incorporated under the provisions of the act to which this is a supplement, or otherwise lawfully existing in this state, to change the name set forth in its original certificate of incorporation, by a two-thirds vote of the board of directors of such association; *provided*, that a certificate under the hands of the president and the secretary of such association, setting forth such proposed new name, and that the same was adopted by a two-thirds vote of the board of directors of such association at a meeting regularly held on a date specified in said certificate, shall be delivered to the clerk of the county where such association is or shall be located, to be by him filed and recorded.

Securities under the old name transferred to the new association.

That the name so certified to have been adopted shall, from the time of filing such certificate of change, be the true and proper corporate title of such association instead of the name set forth in the original certificate of incorporation; and all deeds, mortgages, contracts, actions, judgments, transactions and proceedings whatsoever heretofore or hereafter made, received, entered into, carried on or done by said association before the adoption or certification as aforesaid of such change of name, but wherein the said association shall have been called by the name so subsequently adopted, are hereby declared to be as good, valid and effectual in law as though said association were called therein by the name set forth in its original certificate of incorporation.

PART II.

1. EFFECTS OF THE INDUSTRIAL DEPRESSION.
2. CHILD-LABOR.
3. EFFECT OF REDUCED WORKING-TIME ON PRO-
DUCTION.
4. TRADE AND INDUSTRIAL EDUCATION.

EFFECTS OF THE INDUSTRIAL DEPRESSION.

The inquiry conducted by the Bureau into the results of the industrial depression was undertaken with a full knowledge of the difficulties to be encountered. Some results of such a depression cannot be told in figures even approximately. Other results, such as loss in working time, loss in wages and loss in product, could be accurately tabulated only after a minute inquiry and a searching examination of accounts which would be permitted at few manufacturing establishments. The way to even approximate results was a difficult one. No two industries were affected alike, and few establishments in the same industry experienced like results. The working time changed monthly, if not weekly. Changes in the number employed were probably more frequent; and the consequent changes in total wage payments were further affected by the changes in wage rates.

In the matter of lost time there were many factors. For those who were discharged the entire time was lost. For those who remained on the pay-roll there was lost time in idle days and lost time in reduced working hours. To determine, even with approximate accuracy, this lost time, reports of weekly conditions during the period covered by the inquiry would be desirable. It is doubtful if that could have been obtained from a representative number of establishments. Monthly reports were asked for the fifteen months beginning June 1, 1893, and ending August 31, 1894. A later date could not have been chosen without unduly prolonging the issuance of this report. Industrial conditions mended rapidly, however, after September 1, 1894, so that the inquiry made by the Bureau covers practically the period of the industrial depression.

Monthly conditions were asked, rather than a general statement, in the belief that thereby a closer approach to accuracy could be

made. The mental depression caused by the industrial depression might unconsciously result in exaggerated conclusions. At the best, the answers to general questions, covering the period of the depression, would be mentally and hastily determined averages, perhaps under-estimating or over-estimating the actual results. But a statement of monthly conditions demanded care, attention and an examination of accounts. That so many manufacturers gave the necessary time to it is very gratifying. Many others, it is pleasant to note, reported that they were too busy, when the inquiry was made in September, to give the matter their attention.

THE AREA COVERED.

As only book accounts were desired, the inquiry was limited to some 500 establishments which, because of their size, were presumed to have accounts which would facilitate the filling out of the schedule. Reports were obtained from 414 establishments, but thirty-six of these were omitted from the tabulation because of irre-medial defects in the schedules, or because of inability to classify in a way to protect identity. The 378 reports used represent, however, a very large proportion of the industries of the State, and the conclusions drawn from the figures given may justly be accepted as representing approximately the conditions prevailing in Connecticut during the period of industrial depression covered by the inquiry. Where similarity of classification made it possible, comparison was made by industries between the proportion of the several industries represented in this report and the total of such industries as given in the census of 1890, the basis of comparison being the number of employes, per industry, in 1890 and in 1892. This is the result :

INDUSTRIES.	Per Cent. Number of Employes Represented of Total Reported in Census of 1890.
Brass and Brass Goods,	75.05
Carriages and Carriage Parts,	53.73
Clocks,	48.17
Corsets,	81.57
Cotton,	69.72
Cutlery and Tools,	70.72
Firearms,	35.56
Hardware,	62.14
Hats,	26.13
Hosiery and Knit Goods,	91.94
Machine Shops and Foundries,	77.05
Musical Instruments and Parts,	87.02
Paper Mills,	30.67
Paper Boxes and Envelopes,	67.59
Printing and Book Binding,	44.36
Silk,	73.51
Silver-Plated Ware,	● 92.89
Twine,	60.34
Wood Working,	34.30
Woolen Goods,	74.46

It appears from the foregoing table that about three-fourths of the total of the more important industries in the State are represented in the figures obtained by the Bureau's agents. Many minor industries and many minor establishments were omitted, as also such important industries as the building trades and kindred employments, and yet the total of employes represented is 48.17 per cent. of the total number of employes in all industries as given in the census of 1890, and 47.12 per cent. of the total number of employes as ascertained in the very exhaustive inquiry of this Bureau for 1892.

THE FORM OF THE INQUIRY.

The number of employes, the wages paid and the hours of labor in 1892 were asked to furnish a basis of comparison with the condi-

tions existing during the period of industrial depression, the year 1892 being chosen because it was a fairly prosperous year, and because it was near the period of depression. The form of the inquiry is best shown, however, by the sample schedules which follow, and which are copies of representative schedules in the several industries. The names and the locations of the establishments furnishing the schedules are omitted.

INDUSTRY—BRASS GOODS.

Average number employed in 1892,	200
Weekly hours of labor in 1892,	59 ½
Average monthly expenditure for wages in 1892, .	\$7,249.00

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, .	..	59½	195	\$7,332.32
In July, 1893, .	9	40	187	6,267.71
In August, 1893, .	13	50	176	3,614.75
In Sept., 1893 .	14	30	163	3,413.18
In October, 1893, .	4	40	168	3,987.55
In November, 1893,	2	49	176	7,001.05
In December, 1893,	5	42	180	6,419.33
In January, 1894,	8	40	178	3,983.18
In February, 1894,	4	40	174	4,952.70
In March, 1894, .	8	40	172	5,144.24
In April, 1894, .	3	44	174	5,845.49
In May, 1894, .	4	52	174	7,545.25
In June, 1894, .	6	47	174	4,851.71
In July, 1894, .	10	35	174	4,346.32
In August, 1894, .	5	55	174	6,542.91

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? NO.

Were all employes reduced equally; if so, what per cent.?

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? NO.

Per cent. of employes affected?

Per cent. wages reduced?

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? 83
per cent.

INDUSTRY—IRON FOUNDRY.

Average number employed in 1892.	80
Weekly hours of labor in 1892.	60
Average monthly expenditure for wages in 1892.	\$3,383.38

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, .	2	60	78	\$3,730.25
In July, 1893, .	8	60	79	3,049.48
In August, 1893, .	11	40	79	2,640.69
In Sept., 1893, .	11	40	74	1,939.04
In October, 1893. .	8	40	73	2,759.10 .
In November, 1893.	10	40	73	3,034.18
In December, 1893,	10	40	71	1,997.15
In January, 1894,	10	40	69	1,507.76
In February, 1894,	10	40	68	1,878.77
In March, 1894, .	10	40	66	2,259.98
In April, 1894, .	7	40	70	2,089.52
In May, 1894, .	9	40	69	2,443.97
In June, 1894, .	7	40	69	2,311.35
In July, 1894, .	11	40	66	1,619.78
In August, 1894, .	6	40	67	2,534.56

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? YES.

Were all employes reduced equally; if so, what per cent.? Yes; 10 per cent.

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? NO.

Per cent. of employes affected?

Per cent. wages reduced?

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? About two-thirds.

INDUSTRY—CORSET MANUFACTURING.

Average number employed in 1892,	850
Weekly hours of labor in 1892,	60
Average monthly expenditure for wages in 1892,	\$24,750.00

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, .	..	60	1,000	\$29,400.00
In July, 1893, .	3	50	1,000	24,400.00
In August, 1893, .	10	40	950	15,991.00
In Sept., 1893, .	10	30	900	13,874.00
In October, 1893,	12	32	850	13,400 00
In November, 1893.	11	40	800	14,764.00
In December, 1893,	13	40	750	15,684.00
In January, 1894,	11	40	700	15,432.00
In February, 1894,	11	40	700	15,396.00
In March, 1894, .	11	50	650	17,564.00
In April, 1894, .	4	50	700	18,692.00
In May, 1894, .	..	60	750	20 113 00
In June, 1894, .	..	55	750	19,247.00
In July, 1894, .	..	55	750	19,722.00
In August, 1894, .	..	55	750	19,988.00

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? YES.

Were all employes reduced equally; if so, what per cent.? Average, about 5 per cent.

Did reductions vary; if so, what was the highest and lowest per cent?

WERE PARTIAL REDUCTIONS MADE?

Per cent. of employes affected?

Per cent. wages reduced?

WERE INCREASES MADE?

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? About two-thirds as much in 1893-'94 as in 1892-'93.

INDUSTRY—COTTON MANUFACTURING.

Average number employed in 1892,	515
Weekly hours of labor in 1892,	60
Average monthly expenditure for wages in 1892,	\$13,014.00

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, . . . . .	..	60	595	\$13,917.29
In July, 1893,	2	60	548	14,160.06
In August, 1893,	27	..	....	....
In Sept., 1893,	13	60	273	3,451.90
In October, 1893, . . . . .	..	60	285	6,657.39
In November, 1893, . . . . .	..	60	293	6,949.00
In December, 1893, . . . . .	..	60	453	12,106.14
In January, 1894, . . . . .	..	60	514	11,317.40
In February, 1894, . . . . .	..	60	515	12,017.79
In March, 1894, . . . . .	..	60	539	14,802.89
In April, 1894, . . . . .	..	60	535	12,468.59
In May, 1894,	1	60	533	12,942.09
In June, 1894,	1	60	541	14,941.07
In July, 1894,	5	60	437	9,371.71
In August, 1894,	1	60	535	13,036.38

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? YES.

Were all employes reduced equally; if so, what per cent.? 10 per cent.

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? NO.

Per cent. of employes affected?

Per cent. wages reduced?

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? About
86 per cent. of '92.

INDUSTRY—CARPENTERS' TOOLS.

Average number employed in 1892.	445
Weekly hours of labor in 1892	60
Average monthly expenditure for wages in 1892.	\$22,041.24

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893,	.	80	450	\$27,212.53
In July, 1893,	5	80	450	17,244 68
In August, 1893,	12	30	450	16,653.91
In Sept., 1893.	15	30	450	10,170.70
In October, 1893,	12	30	350	12,608.95
In November, 1893,	9	32	350	11,096.44
In December, 1893,	12	32	350	15,471.38
In January, 1894,	5	42	350	5,626.80
In February, 1894,	4	40	350	11,965.80
In March, 1894,	5	40	350	12,771 78
In April, 1894,	4	40	350	15,366 54
In May, 1894,	8	40	350	14,797.70
In June, 1894,	8	40	350	14,052.24
In July, 1894,	16	40	350	10,724.75
In August, 1894,	10	40	350	13,152.38

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE?

Were all employes reduced equally; if so, what per cent.?

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? YES.

Per cent. of employes affected? About 85 per cent.

Per cent. wages reduced? 5 to 12½ per cent.

WERE INCREASES MADE? VERY FEW.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? About 25 per cent. less.

INDUSTRY—HARDWARE.

Average number employed in 1892,	360
Weekly hours of labor in 1892,	60
Average monthly expenditure for wages in 1892,	\$11,586.00

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, . . . .	..	60	325	\$11,999.58
In July, 1893,	11	36	260	6,061.24
In August, 1893,	12	36	260	7,857.44
In Sept., 1893,	11	36	265	7,384.10
In October, 1893,	7	40	268	7,275.17
In November, 1893,	4	40	271	8,348.52
In December, 1893,	5	40	282	8,681.85
In January, 1894,	5	40	287	8,409.32
In February, 1894,	2	42	300	9,288.28
In March, 1894,	2	40	306	11,261.11
In April, 1894,	1	48½	327	10,663.05
In May, 1894,	4	49½	325	10,459.58
In June, 1894,	1	45	309	11,494.42
In July, 1894,	13	33	286	5,597.34
In August, 1894	9	40½	295	7,899.69

CHANGES IN WAGE RATES FROM JUNE 1, 1893 TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? YES.

Were all employes reduced equally; if so, what per cent? 10 per cent.

Did reductions vary; if so, what was the highest and lowest per cent?

WERE PARTIAL REDUCTIONS MADE? NO.

Per cent. of employes affected?

Per cent. wages reduced?

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892?

INDUSTRY—KNIT UNDERWEAR.

Average number employed in 1892,	150
Weekly hours of labor in 1892.	59
Average monthly expenditure for wages in 1892, . .	\$4,542.11

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, . . . . .	..	59	150	\$4,514.52
In July, 1893,	5	59	150	3,165.04
In August, 1893, . . . . .	..	59	150	3,684.86
In Sept., 1893, . . . . .	..	59	150	2,398.56
In October, 1893, . . . . .	..	59	150	4,607.51
In November, 1893,	1	59	150	4,146.16
In December, 1893, . . . . .	..	59	150	5,535.12
In January, 1894,	7	32	150	2,122.29
In February, 1894,	8	32	150	2,437.88
In March, 1894,	8	32	150	2,307.29
In April, 1894,	2	48	150	3,590.52
In May, 1894,	8	32	150	2,612.67
In June, 1894, . . . . .	..	48	150	3,808.93
In July, 1894,	5	48	150	3,286.96
In August, 1894,	1	48	150	2,949.23

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE?

Were all employes reduced equally; if so, what per cent?

Did reductions vary; if so, what was the highest and lowest per cent?

WERE PARTIAL REDUCTIONS MADE? YES.

Per cent. of employes affected? 1 per cent.

Per cent. wages reduced? Equalized prices on piece-work.

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892?

INDUSTRY—MACHINERY.

Average number employed in 1892.	354
Weekly hours of labor in 1892.	61
Average monthly expenditure for wages in 1892,	\$16,469.38

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893.	4	61	343	\$15,932.58
In July, 1893.	1	61	338	15,701.80
In August, 1893.	..	61	178	8,991.73
In Sept., 1893.	..	61	168	6,557.95
In October, 1893.	..	61	128	5,537.87
In November, 1893.	..	48-60	153	5,903.49
In December, 1893.	1	48	163	6,861.28
In January, 1894.	..	55	183	8,257.81
In February, 1894.	..	58	183	9,550.85
In March, 1894.	..	58	223	11,157.22
In April, 1894.	..	58	248	11,384.69
In May, 1894.	1	58	253	10,879.08
In June, 1894.	1	58	248	10,054.34
In July, 1894.	1	58	253	11,468.27
In August, 1894.	..	58	258	12,976.85

CHANGES IN WAGE RATES FROM JUNE 1, 1893. TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? NO.

Were all employes reduced equally; if so, what per cent.?

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? YES.

Per cent. of employes affected? Very small.

Per cent. wages reduced? Very small (can not estimate).

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? About two-thirds.

INDUSTRY—RUBBER.

Average number employed in 1892,	82
Weekly hours of labor in 1892,	60
Average monthly expenditure for wages in 1892, .	\$2,974.42

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, . .	..	60	95	\$3,183.27
In July, 1893, . .	1	60	95	4,020 17
In August, 1893, . .	..	60	86	3,438.46
In Sept., 1893, . .	1	54	86	2,480.55
In October, 1893, . .	..	54	86	2,393.67
In November, 1893, . .	4	45	86	3,601.48
In December, 1893, . .	1	45	86	2,943.34
In January, 1894, . .	2	54	86	2,016.50
In February, 1894, . .	..	54	86	2,823.13
In March, 1894, . .	..	54	86	2,785.66
In April, 1894, . .	..	54	72	2,169.15
In May, 1894, . .	..	54	60	2,016.08
In June, 1894, . .	..	54	80	2,354.67
In July, 1894, . .	..	54	60	1,654.06
In August, 1894, . .	..	54	60	1,901.90

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE?

Were all employes reduced equally; if so, what per cent.?

Did reductions vary; if so what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? YES.

Per cent. of employes affected? 50 per cent.

Per cent. wages reduced? 10 to 20 per cent.

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employees affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892? Increased 3 per cent.

INDUSTRY—SILK.

Average number employed in 1892,	200
Weekly hours of labor in 1892,	60
Average monthly expenditure for wages in 1892,	\$6,464.44

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, . . . . .	..	60	194	\$6,537.78
In July, 1893,	8	50	190	5,700.86
In August, 1893,	12	30	185	4,175.55
In Sept., 1893,	12	50	174	4,597.73
In October, 1893, . . . . .	.	30	133	3,793.88
In November, 1893,	6	50	125	3,334.28
In December, 1893,	2	45	99	3,516.10
In January, 1894, . . . . .	..	45	125	4,332.39
In February, 1894, . . . . .	..	60	161	4,649.52
In March, 1894, . . . . .	..	60	235	7,168.29
In April, 1894, . . . . .	..	60	229	7,075.16
In May, 1894, . . . . .	..	38	224	5,875.28
In June, 1894,	12	33	189	5,188.81
In July, 1894,	11	33	175	3,871.87
In August, 1894, . . . . .	..	60	184	5,162.16

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE?

Were all employes reduced equally; if so, what per cent.?

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? YES.

Per cent. of employes affected? 50 per cent.

Per cent. wages reduced? 10 per cent.

WERE INCREASES MADE? NO.

Per cent. of, when general?

When partial, per cent. of employees affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892?

INDUSTRY—SILVER-PLATED WARE.

Average number employed in 1892.	475
Weekly hours of labor in 1892.	60
Average monthly expenditure for wages in 1892.	\$20,854.38

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893. . . . .	..	60	345	\$23,910.71
In July, 1893,	11	60	300	13,712.48
In August, 1893,	13	60	310	12,783.31
In Sept., 1893, . . . . .	..	60	307	17,158.63
In October, 1893,	1	60	288	13,197.38
In November, 1893,	2	60	353	17,346.51
In December, 1893, . . . . .	..	60	343	21,627.22
In January, 1894,	11	60	239	8,148.34
In February, 1894, . . . . .	..	48	325	14,153.36
In March, 1894,	1	60	344	19,263.18
In April, 1894, . . . . .	..	60	360	17,510.53
In May, 1894,	4	47	344	15,177.16
In June, 1894,	5	40	344	16,331.60
In July, 1894,	12	44	251	7,830.43
In August, 1894, . . . . .	..	48	357	19,300.55

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE?

Were all employes reduced equally; if so, what per cent!

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE? YES.

Per cent. of employes affected? 20 per cent.

Per cent. wages reduced? 10 per cent.

WERE INCREASES MADE? YES.

Per cent. of. when general?

When partial, per cent. of employes affected? Not more than 2 per cent.

Per cent. wages increased? Probably 10 per cent.

How did production in last fiscal year compare with that in 1892? 25 per cent. less.

INDUSTRY—WOOLEN MANUFACTURING.

Average number employed in 1892,	190
Weekly hours of labor in 1892,	60
Average monthly expenditure for wages in 1892,	\$6,950.00

	Number of Days Entirely Shut Down.	Weekly Hours of Labor.	Average Num- ber Employed.	Total Paid in Wages.
In June, 1893, . .	..	60	190	\$7,742.00
In July, 1893, . .	6	60	190	5,404.00
In August, 1893, .	..	60	190	7,366.00
In Sept., 1893, . .	8	60	190	5,485.00
In October, 1893,	26	..	....	....
In November, 1893,	25	..	....	....
In December, 1893,	..	60	170	4,400.00
In January, 1894,	..	60	170	5,162.00
In February, 1894,	10	60	170	3,000.00
In March, 1894, . .	..	60	170	5,385.00
In April, 1894, . .	6	60	170	4,120.00
In May, 1894, . .	..	60	160	6,432.00
In June, 1894, . .	6	60	160	3,825.00
In July, 1894, . .	10	60	150	3,880.00
In August, 1894, . .	6	60	150	4,345.00

CHANGES IN WAGE RATES FROM JUNE 1, 1893, TO AUGUST 31, 1894.

WERE GENERAL REDUCTIONS MADE? YES. .

Were all employes reduced equally; if so, what per cent.? 10 per cent.

Did reductions vary; if so, what was the highest and lowest per cent.?

WERE PARTIAL REDUCTIONS MADE?

Per cent. of employes affected?

Per cent. wages reduced?

WERE INCREASES MADE?

Per cent. of, when general?

When partial, per cent. of employes affected?

Per cent. wages increased?

How did production in last fiscal year compare with that in 1892?

METHOD OF TABULATION.

In the tabulation comparison was made between the wages paid monthly during the depression and the average monthly payments in wages in 1892, as also between the number employed monthly during the depression and the average number employed in 1892. In the matter of time or hours worked comparison could not be made directly with 1892, as the actual conditions existing during that year were not known. It was not deemed practicable to attempt to ascertain them, although they would be very desirable in an inquiry of this character. The difficulties encountered in ascertaining present conditions would be trebled in an attempt to learn minutely past conditions. The comparison, therefore, as to time worked was made between the actual conditions existing during the period of depression and what may be termed an ideal condition of full time. Calculation was made for each establishment of what would be full time if the average number of employes reported for 1892 were employed the usual (1892) working hours during each work day of the fifteen months of the depression covered by the inquiry. So that the "per cent. hours worked of full time," as given in the tables, is the per cent. of hours worked of the possible full time if industrial conditions had made it advisable to keep in steady employment during the fifteen months from June 1, 1893, to September 1, 1894, the average number employed in 1892.

As there were variations monthly during the depression in the number employed and the hours worked, it was necessary, in order to institute a comparison, to reduce the time worked, as also the full time, to the basis of one employe working the number of hours equivalent to a less number of hours for a larger number of employes. For illustration of the method, take the first of the preceding sample schedules given, a schedule from an establishment in the brass industry. This establishment employed in 1892 an average of 200 people, who worked fifty-nine and one-half hours weekly, or ten hours daily on five days of the week and nine and one-half hours on Saturday. If that number of people had worked full time in June, 1893, each of them would have worked 258 hours, and the total of hours worked would be 200 times 258, or 51,600 hours. During that month 195 people were employed at fifty-nine and one-half hours weekly, so that the hours worked were 50,310, and the per cent. hours worked of full time for that establishment in June, 1893, was 97.50. This calculation was made for each month for each establishment.

RESULTS FOR ALL INDUSTRIES.

The total of full time for all of the 378 establishments for the fifteen months was 252,475,921 hours, and the total of hours worked was 173,855,817. The percentage of hours worked of full time for all establishments was 68.86, or about two-thirds. If comparison could be made between actual conditions in 1892 and conditions during the depression the percentage given would be larger, as there was undoubtedly some lost time in 1892. The average number reported as employed in the 378 establishments in 1892 was 72,227, while the monthly average of employes during the depression was 61,269, or 84.83 per cent. of the number employed in 1892. The average monthly payments for wages in the 378 establishments in 1892 were \$2,715,391.55, while during the depression they were \$2,034,917.13, or 74.94 per cent., a decrease of about twenty-five per cent.

PERCENTAGES FOR EACH INDUSTRY.

The percentages obtained by comparison for each of the twenty-seven industries represented vary widely, in many instances, from the percentages as given for all the establishments in all industries, as some industries were affected more than others by the depression. These percentages, per industry, follow :

JUNE, 1893. TO SEPTEMBER, 1894.

INDUSTRIES.	Per Cent. Hours Worked of Full Time.	Per Cent. Average No. Employed of Average No. in 1892.	Per Cent. Monthly Average Wages Paid of Monthly Average in 1892.
Boots and Shoes and Leather Goods,	70.86	86.88	77.34
Brass and Brass Goods,	70.19	84.39	76.27
Buttons, Buckles and Pins,	69.97	81.55	72.26
Carriages and Carriage Parts,	60.25	79.26	71.29
Cast Iron and Forgings,	61.34	81.62	74.42
Clocks,	75.66	101.61	82.36
Corsets,	71.48	89.21	78.77
Cotton,	80.92	92.84	84.07
Cutlery and Tools,	53.10	85.16	63.87
Firearms,	53.05	59.86	57.46
Hardware,	63.96	80.13	75.75
Hats,	79.74	92.42	78.56
Hosiery and Knit Goods,	70.21	81.20	74.82
Machine Shops,	65.77	82.32	74.10
Manufactures of Cotton Goods,	65.82	81.03	83.74
Musical Instruments and Parts,	46.66	59.90	56.25
Paper Mills,	84.88	95.55	87.28
Paper Boxes and Envelopes,	78.61	84.18	82.29
Printing and Book Binding,	89.47	90.21	97.28
Rubber and Elastic Goods,	82.50	92.31	80.08
Silk,	63.59	92.50	75.42
Silver-Plated Ware,	59.67	86.77	68.95
Stone Cutting,	53.12	67.70	64.34
Twine,	79.70	93.14	92.86
Wire and Wire Goods,	64.93	73.56	68.29
Wood-working,	70.16	87.50	74.60
Woolen Goods,	57.77	74.56	61.34

REDUCTION IN WAGE PAYMENTS.

It will be noted that the large majority of the industries retained on the pay-rolls a large percentage of the ordinary number of employes. The reduction made necessary by the depression was largely in the working time, and this is reflected, with the nearest approach to accuracy, in the lessening of the payments on account of wages. The deepest reduction of wage payments was in the musical instrument industry, where the monthly average was only 56.25 per cent. of the average in 1892. The reduction in the fire-arms industry was almost as large—57.46 per cent. Of the larger industries, woolen goods manufacture felt most keenly the effect of the depression, the monthly wage payments being reduced to 61.34 per cent. of the average in 1892. There was almost as great a reduction in the cutlery industry, and in the quarrying and finishing of stone. In wire and wire goods and in silver-plated ware the reduction in monthly average wage payments was over thirty per cent. In the other industries the monthly average wage payments during the depression were about seventy-five per cent. of the monthly average in 1892, the payments in no one of the industries falling below seventy per cent., and in the majority of the industries being over seventy-five per cent. In the manufacture of paper and twine, and in printing and book-binding, the percentage was unusually high. It was high also in the cotton industry and in the manufacture of articles of cotton cloth. In connection with the percentage in the hat-making industry the explanation should be made that the statistics do not include any of the hat shops in Danbury, the labor troubles in that center of the hat industry creating conditions not conducive to an intelligent presentation of normal facts.

THE LOWEST POINTS IN THE DEPRESSION.

A study of the tables which follow this analysis shows that the lowest points of the depression were in January and July of 1894, though the bottom was touched in several industries in the fall of 1893. In the majority of the industries, and excepting those whose output is governed largely by the seasons, there was a variable fall in wage payments from June, 1893, to September of that year, followed by a variable rise in October and November, a decrease in December, 1893, and January, 1894, an increase to June, a notable

fall in July and a final improvement in August. The conditions in August, 1894, as shown by the percentages of time worked, of number employed and of wages paid, were better than in August, 1893, in fifteen of the twenty-seven industries in the classification—in the manufacture of leather goods, of buttons, brass, carriages, clocks, corsets, cotton, firearms, hardware, hats, musical instruments, paper boxes, rubber goods, silver-ware and wire; while the conditions were worse in twelve industries—cast iron, cutlery, hosiery, machine-building, the manufacture of articles from cotton fabric, paper making, printing, silk weaving, stone-cutting, twine, wood-working and woolen goods.

ESTIMATED PRODUCTION.

The estimated product during the depression was about three-quarters of the normal in the manufacture of shoes and of buttons, in brass goods, cast-iron, corsets, hardware, hosiery, rubber goods, silk and wood-working. It was more than three-quarters in the manufacture of clocks, cotton goods, cotton clothing, paper boxes, hats, paper and twine, and in the printing business, being an estimated ninety-five per cent. in the last named, ninety per cent. in paper and in twine, and eighty-five per cent. in cotton. The lowest production was in musical instruments, where it was only a little more than half of the normal. In wool, in cutlery and in firearms it was about sixty per cent., and in stone-cutting, in wire goods, in machine-building, in carriage-making and in silver-ware the production was about two-thirds.

WORKING TIME.

While the great majority of the establishments reduced working time and lessened the number of employes, a few establishments, either because of specialty in product or for other reasons not known, found it profitable to run their works on full time throughout the depression, some of them even employing more people and doing a larger business. This last fact was most notable in the manufacture of brass and of cotton goods and of hats. On the other hand, the manufacturers of musical instruments ran their establishments less than half time, cutlery and firearms shops ran a little more than half time, and in the carriage and wool industry several establishments ran less than half time, the idle months appearing more frequently in the schedules of the woolen industry than in any other.

CHANGES IN WAGE RATES.

A little more than one-half of the establishments represented reduced the rate of wages. The reductions, as reported, will be found in the tables. The most common percentage of reduction was ten. In many cases the reduction did not affect all of the employes. The industries in which wage-rate cutting was most frequently reported are the manufacture of musical instruments, stone-cutting, cotton, carriage-making, wool, hosiery and knit goods, wire goods, cast-iron and forgings, hardware and cutlery. In several industries not over one-third of the establishments reported reductions in wage rates, and in the one industry of printing and book-binding no changes in wage rates were reported. There were reports of a slight increase in wage rates, sometimes restricted to a portion of the employes, in sixteen establishments, three of them being woolen mills. In four instances the increase was a restoration of part of a previous reduction, three of the four instances being in woolen mills.

All the details supplied by the schedules are presented in the succeeding tables by establishments, industries and months. Each of the establishments is given a serial number, which it retains through the tables.

BOOTS, SHOES AND LEATHER GOODS.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893 to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
1	79.86	75	66	88.00	\$3,331.50	\$2,587.93	77.68
2	86.75	75	75	100.00	2,600.00	2,218.67	85.33
3	89.38	40	40	100.00	2,400.00	2,068.00	86.13
4	....	80	76	95.00	3,695.00	3,289.70	89.03
5	50.29	160	109	68.12	5,700.00	3,453.33	60.58
6	69.10	35	26	74.29	1,200.00	699.87	58.32
7	75.44	175	164	93.71	7,209.46	5,895.71	81.78

PER CENT. HOURS, EMPLOYES AND WAGES BY MONTHS.

MONTHS.	Per Cent, Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments
June, 1893, . .	95.71	4.29	96.09	92.55	7.45
July, 1893, . .	73.12	26.88	90.94	90.07	9.93
August, 1893, . .	68.08	31.92	96.56	77.74	22.26
September, 1893, .	63.80	36.20	91.25	70.89	29.11
October, 1893 .	57.72	42.28	80.63	66.18	33.82
November, 1893, .	63.51	36.49	85.00	67.62	32.38
December, 1893, .	52.16	47.84	84.69	66.24	33.76
January, 1894, .	46.40	53.60	81.56	60.48	39.52
February, 1894, .	76.31	23.69	87.20	78.37	21.63
March, 1894, . .	77.24	22.76	87.66	84.21	15.79
April, 1894, . .	80.22	19.78	87.66	89.29	10.71
May, 1894, . .	81.21	18.79	86.56	84.98	15.02
June, 1894, . .	80.23	19.77	84.22	79.93	20.07
July, 1894, . .	67.99	32.01	77.81	70.91	29.09
August, 1894, . .	78.22	21.78	84.69	80.62	19.38

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
1	14.29	75.00	....	10.00	6.00	....	....	....
2	14.55	80.00	....	....	....	....	....	....
3	10.91	85.00	....	....	....	....	....	....
4	....	89.00	....	....	....	....	....	....
5	1.30	60.00	....	....	....	....	....	....
6	1.29	75.00	10.00	....	....	....	....	....
7	11.69	75.00	....	....	....	....	....	....

BRASS AND BRASS GOODS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishments.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893 to August, 1894.		In 1892.	June, 1893 to Aug., 1894.	
8	100.00	108	109	100.92	\$3,682.80	\$3,104.77	84.29
9	68.51	622	490	78.78	23,189.30	19,865.45	85.67
10	52.46	91	84	92.31	3,794.63	2,670.22	70.36
11	100.00	37	43	116.21	2,534.83	2,568.99	101.35
12	54.91	800	524	65.50	34,466.97	24,721.78	71.73
13	.....	400	395	98.75	16,474.52	14,027.27	85.15
14	57.32	75	52	69.33	2,817.00	2,049.67	72.76
15	100.00	195	226	115.90	9,677.71	10,783.85	111.43
16	67.92	170	128	75.35	.....	.....	.....
17	100.00	35	39	111.43	1,400.00	1,586.00	113.29
18	67.45	322	217	67.39	13,952.55	8,191.33	58.98
19	.....	894	700	78.41	41,300.00	25,541.99	61.84
20	67.13	1200	1038	86.50	49,212.00	38,490.57	78.21
21	.....	814	698	85.75	32,713.50	24,490.01	74.86
22	98.51	60	80	133.33	2,800.00	3,212.67	114.74
23	53.16	88	55	62.50	5,183.70	3,556.67	68.61
24	62.85	282	229	81.20	13,025.63	8,634.13	66.29
25	96.33	320	362	113.13	14,750.00	14,453.33	97.99
26	71.66	90	23	76.67	1,116.00	882.55	79.08
27	100.00	45	59	131.11	1,533.00	1,859.07	121.27
28	100.00	27	30	111.11	1,050.00	1,118.40	106.51
29	64.05	30	28	93.33	1,039.50	683.48	65.75
30	82.95	216	191	88.43	9,021.00	6,761.60	74.95
31	54.24	260	183	70.38	13,117.28	6,838.05	52.13
32	74.29	256	220	85.94	8,617.82	6,553.29	76.06
33	69.19	267	236	88.39	8,822.00	7,223.33	81.88
34	64.13	525	437	83.24	19,265.00	13,780.33	71.53
35	71.31	335	283	84.48	11,416.66	9,835.06	86.15
36	89.02	86	83	96.51	3,200.00	2,937.33	91.79
37	57.60	200	176	88.00	7,249.00	5,416.51	74.72

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	95.58	4.42	99.72	97.80	2.20
July, 1893, . .	72.24	27.76	93.63	82.74	17.26
August, 1893, . .	58.04	41.96	80.11	65.18	34.82
September, 1893, .	61.92	38.08	78.33	63.44	36.56
October, 1893. .	70.38	29.62	80.44	70.73	29.27
November, 1893. .	69.01	30.99	81.06	72.26	27.74
December, 1893. .	57.26	42.74	80.13	72.04	27.96
January, 1894, . .	57.34	42.66	76.93	60.78	39.22
February, 1894, . .	66.12	33.88	81.42	69.11	30.89
March, 1894, . .	69.72	30.28	83.64	82.96	17.04
April, 1894, . .	75.00	25.00	85.21	81.56	18.44
May, 1894, . .	75.94	24.06	85.59	82.45	17.55
June, 1894. . .	75.54	24.46	86.08	87.47	12.53
July, 1894, . .	67.77	32.23	86.42	72.09	27.91
August, 1894, . .	80.01	19.99	86.88	85.95	14.05

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
8	....	90.00	....	....	....	....	....	....
9	14.55	75.00	....	....	....	....	....	....
10	42.07	66.00	....	....	....	....	....	....
11	....	110.00	....	....	....	....	....	....
12	8.05	70.00	....	10 to 40	20 to 30	....	....	....
13	9.87	65.00	....	5 to 7.50	30.00	....	....	....
14	9.35	65.00	....	....	....	....	....	....
15	....	110.00	....	....	....	....	....	....
16	7.79	66.00	10.00	....	....	....	....	....
17	5.19	115.00	....	....	....	....	....	....
18	.26	60.00	....	....	....	....	....	....
19	5.19	65.00	10.00	....	....	....	....	....
20	12.20	75.00	....	....	....	....	....	....
21	16.36	80.00	....	....	....	....	....	....
22	16.88	112.00	....	....	....	....	5 to 10	10.00
23	12.73	65.00	....	10.00	50.00	....	....	....
24	22.34	70.00	10.00	....	....	....	....	....
25	.52	95.00	....	....	....	....	....	....
26	6.23	75.00	....	....	....	....	....	....
27	2.60	128.00	....	....	....	....	....	....
28	.26	105.00	....	....	....	....	10.00	35.30
29	27.79	65.00	....	....	....	....	....	....
30	6.64	87.00	....	10.00	89.00	....	....	....
31	22.34	66.00	10 to 15	....	....	....	....	....
32	14.03	80.00	....	10.00	75.00	....	....	....
33	20.78	75.00	....	....	....	....	....	....
34	9.61	70.00	....	10.00	75.00	....	....	....
35	16.10	70.00	....	....	....	....	....	....
36	5.71	90.00	10 to 25	20.00	75.00	....	....	....
37	24.16	83.00	....	....	....	....	....	....

BUTTONS, BUCKLES AND PINS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
38	23.00	75	28	39.33	\$2,000.00	\$550.00	27.50
35	30.38	34	20	58.82	879.73	359.11	40.82
40	100.00	30	30	100.00	....	....	....
41	75.31	350	286	81.72	11,911.00	8,079.00	67.83
42	86.01	103	95	92.23	3,138.68	2,256.16	71.88
43	68.56	218	196	89.91	7,534.00	6,007.98	79.74
44	48.17	65	34	52.31	1,928.48	992.38	51.46
45	37.62	75	50	66.67	2,733.62	1,882.26	68.86
46	100.00	150	158	105.33	5,000.00	5,253.35	105.07

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	88.98	11.02	98.00	92.84	7.16
July, 1893, . .	76.05	23.95	90.72	72.51	27.49
August, 1893, . .	62.10	37.90	80.27	59.93	40.07
September, 1893, .	50.37	49.63	73.81	55.25	44.75
October, 1893, .	54.03	45.97	74.36	62.66	37.34
November, 1893, .	53.92	46.08	71.45	58.42	41.58
December, 1893, .	48.34	51.66	70.36	63.05	36.95
January, 1894, .	65.44	34.56	77.18	65.66	34.34
February, 1894, .	70.64	29.36	81.27	70.72	29.28
March, 1894, . .	76.01	23.99	85.36	82.54	17.46
April, 1894, . .	81.37	18.63	85.90	93.62	6.38
May, 1894, . .	80.20	19.80	85.81	82.50	17.50
June, 1894, . .	78.54	21.46	82.63	80.38	19.62
July, 1894, . .	74.55	25.45	80.81	70.74	29.26
August, 1894, . .	78.20	21.80	83.00	72.79	27.21

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tions.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
38	48.83	30.00	10.00	....	....	....	....	....
39	34.03	50.00	33.33	....	....	....	....	....
40	....	80.00	....	....	....	....	....	....
41	12.21	66.00	....	....	....	....	....	....
42	7.01	80.00	10 to 20	....	....	....	....	....
43	11.17	74.00	....	....	....	....	....	....
44	4.99	66.00	....	25.00	50.00	....	....	....
45	45.45	66.00	....	....	....	....	....	....
46	8.57	110.00	10.00	....	....	....	....	....

CARRIAGES AND CARRIAGE PARTS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
47	47.52	48	39	81.25	\$2,223.41	\$1,453.63	65.38
48	76.65	40	40	100.00	1,800.00	1,495.51	83.09
49	68.64	67	64	95.52	1,950.98	1,543.23	78.59
50	76.59	56	52	92.86	2,239.08	1,800.65	80.42
51	45.42	107	86	80.37	3,224.93	2,322.95	72.03
52	70.28	58	47	81.63	3,240.00	2,439.80	75.30
53	.....	40	33	82.50	2,020.18	1,568.60	77.65
54	60.59	125	108	85.60	6,524.00	4,834.53	74.10
55	91.91	38	37	97.37	2,225.66	2,041.66	91.73
56	48.76	41	32	78.05	1,680.00	1,111.58	66.17
57	100.00	125	125	100.00	7,500.00	7,062.73	94.17
58	78.40	14	12	85.71	612.00	444.73	72.67
59	62.57	52	35	67.31	1,844.00	1,561.85	84.70
60	39.07	70	42	60.00	3,000.00	1,301.00	43.37
61	52.38	92	54	58.70	5,300.00	2,662.80	50.24
62	68.66	90	70	77.78	6,000.00	4,353.33	72.56
63	23.91	75	26	34.67	4,000.00	1,486.67	37.17

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time	Per Cent. Less than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	92.62	7.88	96.22	99.80	.20
July, 1893, . .	71.42	28.58	91.03	80.25	19.75
August, 1893, . .	54.56	45.44	71.17	61.96	38.04
September, 1893, .	48.67	51.33	68.10	62.65	37.35
October, 1893, .	51.80	48.20	73.19	58.74	41.26
November, 1893, .	55.92	44.08	76.01	65.61	34.39
December, 1893, .	48.16	51.84	76.36	62.71	37.29
January, 1894, .	59.55	40.45	78.03	66.71	33.29
February, 1894, .	64.88	35.12	79.08	68.25	31.75
March, 1894, . .	67.12	32.88	82.16	81.86	18.14
April, 1894, . .	75.98	24.02	84.78	77.67	22.33
May, 1894, . .	72.57	27.43	83.47	81.95	18.05
June, 1894, . .	71.56	28.44	83.30	81.26	18.74
July, 1894, . .	51.01	48.99	71.79	53.38	46.62
August, 1894, .	56.54	43.46	73.72	66.42	33.58

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
47	39.22	71.00	....	....	....	....	....	....
48	15.84	76.00	....	....	....	....	....	....
49	22.86	78.00	10.00	....	....	....	....	....
50	5.97	83.00	10.00	....	....	....	....	....
51	37.14	66.67	1 to 20	10.00	50.00	....	....	....
52	3.12	70.00	....	5.00	13.00	....	....	....
53	4.53	70.00	10.00	....	....	....	....	....
54	17.40	68.00	....	10.00	25.00	....	....	....
55	1.30	90.00	....	5.00	20.00	....	....	....
56	21.30	65.00	....	10 to 25	60.00	....	....	....
57	....	100.00	....	....	....	....	....	....
58	7.27	78.00	....	10.00	75.00	....	....	....
59	3.39	73.00	....	....	....	....	....	....
60	37.40	43.00	....	....	....	....	....	....
61	7.53	54.00	....	10.00	50.00	....	....	....
62	5.71	74.00	....	5 to 10	75.00	....	....	....
63	....	45.00	10 to 25	....	....	....	....	....

CAST IRON AND FORGINGS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
64	80.46	150	140	93.33	\$8,000.00	\$6,895.20	86.19
65	55.94	471	358	76.01	18,184.10	10,479.13	57.63
66	61.99	50	44	88.00	3,069.00	2,384.87	77.71
67	77.13	44	38	86.36	2,000.00	1,746.67	87.33
68	52.30	80	61	76.25	3,885.43	2,175.78	56.00
69	51.49	55	32	58.18	1,750.55	983.26	56.17
70	49.85	621	399	64.25	25,727.91	15,729.49	68.91
71	93.86	180	175	97.22	7,000.00	6,253.33	89.33
72	76.30	322	289	89.75	12,584.06	10,537.77	83.74
73	95.33	50	53	106.00	2,155.00	1,956.60	90.79
74	59.57	45	29	64.44	2,078.05	1,522.30	73.25
75	74.77	48	42	87.50	2,166.89	1,680.74	77.56
76	66.67	45	45	100.00	2,500.00	1,666.67	66.67
77	64.00	120	77	64.17	6,000.00	3,393.93	56.57
78	96.88	60	60	100.00	2,500.00	2,250.00	90.00
79	89.40	228	204	89.47	10,833.00	9,470.47	87.42
80	59.51	80	71	88.75	3,383.38	2,386.37	70.53
81	50.00	150	75	50.00	5,809.78	3,488.11	60.04
82	74.69	140	115	82.14	8,016.00	6,780.00	84.58
83	68.14	124	109	87.90	5,000.00	4,040.00	80.80
84	61.84	140	140	100.00	8,500.00	5,493.02	64.62
85	87.94	505	455	90.10	28,388.00	24,070.80	84.79
86	100.00	30	40	133.33	1,291.67	1,746.67	135.23

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	99.73	.27	102.27	111.43	*11.43
July, 1893, . .	88.61	11.39	95.50	93.21	6.79
August, 1893, . .	80.79	19.21	91.81	85.79	14.21
September, 1893, .	73.42	26.58	84.64	77.98	22.02
October, 1893, .	68.82	31.18	80.25	70.43	29.57
November, 1893, .	70.69	29.31	79.40	73.25	26.75
December, 1893, .	63.16	36.84	78.00	69.35	30.65
January, 1894, .	59.97	40.03	75.36	58.73	41.27
February, 1894, .	67.14	32.86	76.51	63.28	36.72
March, 1894, . .	62.89	37.11	77.42	72.33	27.67
April, 1894, . .	64.86	35.14	77.52	66.39	33.61
May, 1894, . .	64.93	35.07	77.23	70.96	29.04
June, 1894, . .	64.26	35.74	76.99	76.68	23.32
July, 1894, . .	54.44	45.56	71.77	56.11	43.89
August, 1894, . .	71.27	28.73	80.23	71.34	28.66

* Increase.

Number of Establishment.	Per Cent. Idle Days of Working Days.	Per Cent. Production in Last Fiscal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduction.		Per Cent.	Per Cent. of Increase.
64	16.88	84.00	5 00	50.00
65	28.05	60.00	3 to 12
66	30.13	80.00	17.00
67	13.51	87.00
68	22.60	60.00	10 to 15
69	14.28	54.00
70	5.93	63.00	3 to 15	90.00
71	92.00	15.00	5.00
72	3.90	80.00
73	93.00
74	13.77	77.00
75	5.71	82.00	5 to 10	75.00
76	75.00
77	67.00	10.00
78	3.12	90.00	10.00
79	87.00
80	33.25	66.00	10.00
81	65.00	10.00	50.00
82	1.04	80.00	10.00	75.00	10.00	75.00
83	9.35	75.00
84	38.18	70 00	7 to 20
85	85.00	30.00
86	135.00

CLOCKS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average Number in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
87	90.61	710	864	121.69	\$30,430.00	\$29,566.67	97.16
88	54.01	108	101	93.52	4,255.00	2,510.72	59.01
89	58.84	550	425	77.27	25,000.00	17,078.57	68.31

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	111.27	*11.27	116.16	102.55	*2.55
July, 1893, . .	101.75	*1.75	114.54	107.21	*7.21
August, 1893, . .	51.35	48.65	111.98	58.25	41.75
September, 1893, .	65.30	34.70	107.67	85.63	14.37
October, 1893, .	96.81	3.19	109.42	92.10	7.90
November, 1893, .	99.43	.57	108.40	97.30	2.70
December, 1893, .	78.76	21.24	106.06	87.95	12.05
January, 1894, .	77.73	22.27	103.94	74.48	25.52
February, 1894, .	79.59	20.41	103.21	78.60	21.40
March, 1894, . .	68.39	31.61	97.88	83.14	16.86
April, 1894, . .	72.17	27.83	98.46	77.67	22.33
May, 1894, . .	76.70	23.30	97.66	78.07	21.93
June, 1894, . .	71.16	28.84	93.27	79.77	20.23
July, 1894, . .	32.19	67.81	66.73	42.26	57.74
August, 1894, . .	57.05	42.95	88.88	61.65	38.35

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
87	13.25	110.00	....	....	....	....	....	....
88	33.25	55.00	....	....	....	....	....	....
89	25.71	70.00	5 to 20	....	....	....	....	....

CORSETS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894,		In 1892.	June, 1893, to Aug., 1894.	
90	57.98	200	142	71.00	\$6,000.00	\$3,353.33	55.88
91	43.42	90	52	57.78	2,500.00	981.67	39.27
92	71.65	1,800	1,507	83.72	40,000.00	28,503.10	71.26
93	65.73	850	800	94.12	24,750.00	18,249.13	73.74
94	48.83	75	57	76.00	2,100.00	1,295.67	61.22
95	82.07	575	608	105.74	12,100.00	14,593.40	120.61
96	95.94	125	150	120.00	4,000.00	3,826.80	95.67
97	71.45	290	239	82.41	10,000.00	8,623.34	86.23
98	100.00	35	49	140.00	1,000.00	1,273.33	127.33

PER CENT HOURS, EMPLOYEES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	86.32	13.68	94.52	98.00	2.00
July, 1893, . .	63.61	36.39	93.21	82.36	17.64
August, 1893, . .	50.66	49.34	81.16	50.72	49.28
September, 1893, .	46.47	53.53	85.71	59.89	40.11
October, 1893, .	55.46	44.54	84.60	63.25	36.75
November, 1893, .	61.69	38.31	83.71	65.79	34.21
December, 1893, .	46.38	53.62	84.10	61.25	38.75
January, 1894, .	71.87	28.13	88.19	63.75	36.25
February, 1894, .	75.07	24.93	88.51	77.26	22.74
March, 1894, . .	79.45	20.55	87.00	96.33	3.67
April, 1894, . .	87.05	12.95	90.47	96.90	3.10
May, 1894, . .	91.72	8.28	92.79	97.86	2.14
June, 1894, . .	91.20	8.80	90.42	94.27	5.73
July, 1894, . .	75.42	24.58	93.98	81.62	18.38
August, 1894, . .	90.25	9.75	94.87	92.08	7.92

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per. Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
90	....	50.00	...	....	....	....	....	....
91	4.68	42.00	....	....	....	....	....	....
92	15.32	90.00	....	....	....	....	....	....
93	22.08	67.00	5.00	....	....	....	....	....
94	28.87	75.00	....	....	....	....	....	....
95	19.22	103.50	....	....	....	....	....	....
96	18.44	120.00	....	....	....	....	....	....
97	11.43	85.00	5.00	....	....	....	....	....
98	.78	135.00	10.00	....	....	....	....	....

COTTON.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
99	67.88	175	152	86.86	\$3,900.00	\$2,640.00	67.69
100	73.97	120	100	83.33	2,993.16	2,641.38	88.24
101	100.00	107	117	109.35	4,591.11	5,163.51	112.47
102	90.49	50	47	94.00	1,600.00	1,546.67	96.67
103	92.06	700	701	100.14	15,064.13	14,327.26	95.11
104	40.58	250	151	60.40	6,400.00	3,389.80	52.96
105	71.88	56	27	75.00	871.57	592.03	67.93
106	96.06	455	452	99.32	17,000.00	17,166.67	100.98
107	100.00	140	150	107.14	3,439.00	4,196.00	122.01
108	70.22	235	219	93.19	6,640.00	4,832.63	72.78
109	80.98	515	440	85.44	13,014.00	10,542.64	81.01
110	47.61	32	21	65.63	800.00	441.00	55.12
111	52.31	126	81	64.28	1,848.42	932.23	50.43
112	.....	214	....	....	5,595.81	4,203.48	75.16
113	.....	225	....	....	5,477.92	4,376.69	79.89
114	.....	250	....	....	6,948.00	5,284.12	76.05
115	99.07	324	321	99.07	7,502.72	7,288.31	97.14
116	83.33	490	423	86.12	12,675.00	11,721.34	92.48
117	88.24	75	75	100.00	1,500.00	1,529.19	101.95
118	100.00	150	150	100.00	3,860.00	3,352.65	86.86
119	70.28	147	147	100.00	3,842.96	2,770.21	72.09
120	96.92	139	139	100.00	3,664.54	3,230.46	88.15
121	93.03	198	233	117.68	5,833.92	6,270.05	107.48
122	52.78	560	413	73.75	16,784.00	9,926.62	59.14
123	69.72	267½	235	88.01	7,725.00	5,516.38	71.41
124	67.98	1526	1415	92.73	48,047.83	37,702.46	78.47
125	91.43	110	105	95.45	2,487.00	2,359.83	94.89
126	74.20	78	59	75.64	2,247.00	1,736.20	77.27
127	84.26	145	140	96.55	2,675.94	2,373.50	88.70
128	82.86	100	100	100.00	3,600.00	2,941.67	81.71

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.—CONTINUED.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
129	85.01	40	40	100.00	\$1,083.33	\$ 961.11	88.72
130	100.00	103	104	100.97	3,377.96	3,601.66	106.77
131	87.27	200	200	100.00	5,000.00	4,498.73	89.97
132	93.83	125	128	102.40	3,600.00	3,239.33	89.98
133	91.95	167	167	100.00	5,000.00	4,466.67	89.33
134	92.39	131	135	103.05	3,600.00	3,070.00	85.28
135	78.01	279	240	86.02	5,733.80	4,277.72	74.60
136	100.00	156	204	130.77	4,500.00	4,906.67	109.04
137	94.03	210	210	100.00	5,047.65	4,853.65	96.16

PER CENT. HOURS, EMPLOYEES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	95.96	4.04	102.26	104.30	*4.30
July, 1893, . .	85.72	14.28	98.58	97.79	2.21
August, 1893, . .	62.75	37.25	84.23	76.44	23.56
September, 1893, .	53.51	46.49	74.37	61.11	38.89
October, 1893, .	73.10	26.90	83.23	71.95	28.05
November, 1893, .	78.72	21.28	90.54	83.44	16.56
December, 1893, .	83.12	16.88	92.10	82.95	17.05
January, 1894, .	78.91	21.09	94.45	78.98	21.02
February, 1894, .	86.98	13.02	95.71	82.07	17.93
March, 1894, . .	88.77	11.23	96.24	90.67	9.33
April, 1894, . .	92.67	7.33	97.74	87.88	12.12
May, 1894, . .	90.40	9.60	97.19	92.83	7.17
June, 1894, . .	87.59	12.41	96.94	89.34	10.66
July, 1894, . .	76.41	23.59	94.81	78.57	21.43
August, 1894, . .	70.46	29.54	92.50	81.42	18.58

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.
99	13.25	67.00	10.00	....	....	....	....	....
100	....	80.00	....	....	....	....	....	....
101	....	112.00	10.00	....	....	....	....	....
102	3.12	90.00	....	....	....	....	....	....
103	8.05	104.00	10.00	....	....	....	....	....
104	....	50.00	5 to 12.50	....	....	....	....	....
105	10.65	80.00	15.00	....	....	....	....	....
106	3.38	100.00	....	....	....	....	....	....
107	1.82	140.00	10.00	....	....	....	....	....
108	18.97	75.00	....	7 to 10	75.00	....	....	....
109	12.99	86.00	10.00	....	....	....	....	....
110	45.97	75.00	....	10.00	50.00	....	....	....
111	30.13	50.00	....	....	....	....	....	....
112	8.05	75.00	....	....	....	....	....	....
113	5.19	88.40	7.50	....	....	....	....	....
114	7.53	75.00	1 to 10	....	....	....	....	....
115	....	103.00	1 to 12	....	....	....	....	....
116	9.87	100.00	3 to 8	....	....	....	....	....
117	11.69	100.00	10.00	....	....	....	....	....
118	....	90.00	5 to 20	....	....	....	....	....
119	8.83	87.50	1 to 10	....	....	....	....	....
120	3.12	100.00	5 to 15	....	....	....	....	....
121	2.60	105.00	....	....	....	....	....	....
122	27.53	65.00	10.00	....	....	....	....	....
123	21.04	81.50	15.00	....	....	....	....	....
124	7.02	85.50	10.00	....	....	....	....	....
125	10.90	97.00	7.00	....	....	....	....	....
126	2.08	77.00	....	....	....	....	....	....

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.— CONTINUED.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
127	12.73	92.00	15.00	....	....	....	....	....
128	17.14	82.00	....	....	....	....	....	....
129	14.29	87.00	....	....	....	....	....	....
130	....	100.00	....	....	....	....	....	....
131	12.73	90.00	15.00	....	....	....	....	..
132	8.05	100.00	18.00	....	....	....	....	....
133	8.05	100.00	18.00	....	....	....	....	....
134	10.39	100.00	18.00	....	....	....	....	....
135	21.30	88.00	10.00	....	....	....	....	....
136	3.64	120.00	12.50 17.50	....	....	....	....	....
137	5.97	110.00	15.00	....	....	....	....	....

CUTLERY AND TOOLS.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
138	....	275	....	....	\$6,043.30	\$3,815.28	63.13
139	48.30	200	180	90.00	9,500.00	4,900.00	51.58
140	73.53	100	100	90.91	4,000 00	3,603.33	90.08
141	40.13	145	100	68.97	4,173.98	2,225.81	53.33
142	46.38	89	62	69.66	3,957.00	1,913.82	48.36
143	49.51	445	377	84.72	22,041.24	13,927.77	63.19
144	79.16	42	40	97.62	1,993.45	1,738.59	87.16
145	39.46	80	52	65.00	3,500.00	....	....
146	68.08	90	00	100.00	3,600.00	2,849.42	79.15
147	72.12	32	31	96.88	1,456.27	1,182.30	81.18
148	90.65	35	35	100.00	1,773.27	1,569.99	88.54
149	49.68	83	75	90.36	5,500.00	3,172.04	57.67

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	78.57	21.43	82.32	91.04	8.96
July, 1893, . .	56.32	43.68	76.21	66.33	33.67
August, 1893, . .	56.17	43.83	87.99	69.98	30.02
September, 1893, .	45.80	54.20	81.87	51.87	48.13
October, 1893, .	52.38	47.62	85.53	63.02	36.98
• November, 1893, .	51.49	48.51	85.75	64.11	35.89
December, 1893, .	44.53	55.47	85.68	67.77	32.23
January, 1894, .	48.33	51.67	80.90	45.13	54.87
February, 1894, .	52.52	47.48	80.90	59.33	40.67
March, 1894, . .	54.07	45.93	84.93	63.77	36.23
April, 1894, . .	57.97	42.03	84.19	66.77	33.23
May, 1894, . .	56.01	43.99	83.81	69.25	30.75
June, 1894, . .	54.12	45.88	83.07	66.60	33.40
July, 1894, . .	33.54	66.46	69.87	43.56	56.44
August, 1894, . .	53.08	46.92	83.96	66.97	33.03

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
138	....	60.00	....	....	....	....	....	....
139	19.74	60.00	....	....	....	....	....	....
140	....	90.00	....	2.50	25.00	....	....	....
141	16.90	50.00	....	....	....	....	....	....
142	34.55	90.00	10.00	....	....	....	..	....
143	32.49	75.00	....	5 to 12.50	85.00	....	....	....
144	8.31	95.00	....	5.00	50.00	....	....	....
145	41.30	50.00	....	5 to 20	90.00	....	....	....
146	29.61	73.00	....	....	..	....	....	..
147	10.39	79.00	....	10.00	50.00	....	....	..
148	9.35	85.00	....	....	....	....	....	....
149	48.57	50.00	....	10.00	....	....	20 to 25	33.33

FIREARMS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
150	52.45	329	200	60.79	\$14,717.00	\$8,650.33	58.78
151	59.68	40	25	62.50	1,840.68	1,056.45	57.99
152	52.15	57	80	52.63	2,149.56	1,042.95	48.52

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	100.70	* .70	100.70	108.01	*8.01
July, 1893, . .	90.52	9.48	99.53	87.92	12.08
August, 1893, . .	35.96	64.04	45.07	57.23	42.77
September, 1893, .	25.50	74.50	34.50	30.93	69.07
October, 1893, .	23.04	76.96	33.33	28.19	71.81
November, 1893, .	30.52	69.48	41.03	36.41	63.59
December, 1893, .	33.98	66.02	44.83	39.89	60.11
January, 1894, .	44.50	55.50	54.46	47.31	52.69
February, 1894, .	45.38	54.62	58.45	51.99	48.01
March, 1894, . .	59.29	40.71	63.84	61.04	38.96
April, 1894, . .	63.74	36.26	66.47	64.43	35.57
May, 1894, . .	67.20	32.80	67.60	63.56	36.44
June, 1894, . .	62.24	37.76	64.31	67.00	33.00
July, 1894, . .	62.63	37.37	65.02	64.02	35.98
August, 1894, . .	49.42	50.58	59.81	54.26	45.74

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. of Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
150	8.31	68.00	5 to 20	10.00	30.00	....	....	....
151	....	72.00	40.00	....	....	....	....	....
152	7.53	52.00	5 to 10	....	....	....	....	....

HARDWARE.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893. to Aug., 1894.	
153	41.16	40	23	57.50	\$1,200.00	\$ 592.03	49.34
154	60.05	65	50	76.92	2,500.00	1,686.67	67.47
155	....	50	51	102.00	1,100.00	847.93	77.08
156	84.44	110	50	98.33	3,064.34	2,271.97	74.14
157	72.30	50	45	90.00	1,575.00	1,313.07	83.37
158	39.20	30	15	50.00	1,000.00	527.67	52.77
159	52.03	175	141	80.57	6,750.00	5,543.78	82.13
160	63.46	250	197	78.80	10,000.00	8,200.00	82.00
161	36.34	700	319	45.57	....	....	....
162	51.77	110	20	66.67	1,000.00	600.00	60.00
163	47.89	360	291	80.83	11,586.00	8,912.05	76.92
164	96.61	366	353	96.45	15,497.32	16,258.55	104.91
165	54.95	120	83	68.17	3,520.65	2,592.18	73.63
166	97.22	300	293	97.67	12,250.00	11,707.13	95.57
167	76.10	180	173	96.11	8,627.25	7,700.00	89.25
168	67.01	202	144	71.29	7,344.00	4,691.07	63.82
169	63.08	50	47	94.00	2,783.00	1,798.86	64.64
170	47.59	100	59	59.00	2,800.00	1,789.80	63.92
171	47.50	150	100	66.67	4,500.00	2,906.67	64.59
172	68.40	225	185	82.22	11,000.00	7,420.00	67.45
173	54.24	175	114	68.14	4,755.30	3,969.33	83.47
174	65.81	123	117	95.12	4,558.12	2,829.65	62.08
175	42.45	350	246	70.29	16,996.00	7,668.94	45.12
176	48.04	520	402	77.31	24,190.71	16,784.36	69.38
177	78.80	280	244	87.14	13,400.64	10,347.59	77.22
178	100.00	60	110	100.00	3,000.00	3,000.00	100.00
179	89.87	16	15	93.75	657.00	563.44	85.76
180	73.42	21	13	61.91	1,000.00	763.33	76.33
181	79.92	500	829	92.11	41,500.00	32,000.00	77.11

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.—CONTINUED.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
182	44.47	49	24	48.98	\$2,167.60	\$ 791.20	36.50
183	87.13	75	70	93.33	2,214.00	1,599.43	72.24
184	65.98	89	76	85.39	2,756.75	2,209.00	80.13
185	82.56	111	101	90.99	3,395.48	3,432.99	101.10
186	63.96	152	138	90.79	6,770.00	5,228.00	77.22
187	49.74	102	86	84.31	3,667.00	2,107.53	57.47
188	85.26	75	67	89.33	2,700.00	2,686.67	99.51
189	71.90	191	186	97.38	4,973.44	3,668.15	73.75
190	53.56	102	88	86.27	3,700.00	2,751.20	74.36

PER CENT. HOURS. EMPLOYEES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	95.08	4.92	99.04	104.80	*4.80
July, 1893, . .	62.88	37.12	81.30	68.99	31.01
August, 1893, . .	58.08	41.92	76.99	75.17	24.83
September, 1893, .	52.39	47.61	75.15	66.71	33.29
October, 1893, .	56.74	43.26	72.99	65.59	34.41
November, 1893, .	58.67	41.33	76.08	72.24	27.76
December, 1893, .	57.45	42.55	78.15	70.02	29.98
January, 1894, .	54.54	45.46	72.93	66.06	33.94
February, 1894, .	65.92	34.08	79.03	73.99	26.01
March, 1894, . .	66.09	33.91	85.72	82.61	17.39
April, 1894, . .	69.71	30.29	83.94	80.79	19.21
May, 1894, . .	69.85	30.15	82.62	83.58	16.42
June, 1894, . .	69.60	30.40	83.37	81.78	18.22
July, 1894, . .	57.51	42.49	75.93	61.33	38.67
August, 1894, . .	67.13	32.87	82.15	78.60	21.40

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
153	21.56	52.00	10 to 15	10 to 15	20.00	....	....	....
154	....	68.00	....	....	....	....	....	....
155	9.39	75.00	....	....	....	....	....	....
156	14.03	80.00	....	10 00	20.00	....	....	....
157	14.81	75.00	....	....	....	....	....	....
158	11.97	87.00	....	10 to 15	50.00	....	....	....
159	15.06	86.00	....	....	....	....	....	....
160	....	80.00	....	....	....	....	....	....
161	....	50.00	5 to 15	10.00	30.00	....	....	....
162	12.21	60.00	10.00	....	....	....	....	....
163	22.86	70.00	10.00	....	....	....	....	....
164	....	102.00	....	10.00	10.00	....	....	....
165	4.68	66.00	....	....	....	....	....	....
166	....	95 00	....	....	....	....	....	....
167	25.19	83.00	....	....	....	....	....	....
168	....	74.00	10 to 25	....	....	....	....	....
169	31.95	63.00	....	15.00	3.00	....	....	....
170	8.05	70.00	10.00	.	...	....	....	....
171	12.99	56.00	....	....	....	....	....	....
172	22.08	75.00	10 to 25	....	....	....	....	....
173	7.79	70.00	10.00	....	....	....	....	....
174	14.29	65.00	....	10 to 20	10.00	....	....	....
175	35.84	80.00	....	5 to 25	95.00	....	....	....
176	33.25	60.00	10.00	....	....	....	....	....
177	.78	75.00	....	....	....	....	....	....
178	....	100.00	....	....	....	....	....	....
179	6.49	100.00	....	10.00	20.00	....	....	....
180	11.43	66.00	....	....	....	....	....	....
181	14.55	87.00	10.00	....	....	....	....	....

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.—CONTINUED.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
182	12.73	70.00	25 to 33.33	....	....	....	....	....
183	....	87.00	15.00	....	....	....	....	....
184	11.95	80.00	5.00	....	....	....	....	....
185	9.61	100.00	....	10.00	50.00	....	....	....
186	17.92	72.00	....	....	....	....	....	....
187	12.21	65.00	5 to 25	....	....	....	....	....
188	17.66	100.00	....	....	....	....	....	....
189	21.82	70.00	....	1 to 7.50	40.00	....	....	....
190	25.84	75.00	....	....	....	....	....	....

HATS.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893 to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
121	....	112	119	106.25	\$6,500.00	\$4,893.29	75.28
192	100.00	65	76	116.92	3,650.00	3,916.40	107.30
193	80.25	200	190	95.00	7,000.00	6,991.60	99.88
194	98.65	70	75	107.14	2,200.00	2,444.66	111.11
195	....	125	85	68.00	4,609.00	2,460.58	53.39
196	....	300	300	100.00	12,500.00	11,458.67	91.67
197	45.92	200	133	66.50	10,580.00	6,173.00	58.35
198	67.63	70	53	82.86	3,120.00	2,075.20	66.51
199	100.00	50	54	108.00	2,400.00	2,640.00	110.00
200	33.45	130	71	54.62	6,500.00	1,436.20	22.10
201	72.47	50	40	80.00	....	....	....
202	....	85	84	98.82	4,900.00	3,186.67	65.03
203	100.00	150	187	124.67	7,000.00	6,994.28	99.06
204	100.00	175	175	100.00	5,000.00	5,000.00	100.00

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	59.54	40.46	79.91	48.83	51.17
July, 1893, . .	38.02	61.98	65.88	44.62	55.38
August, 1893, . .	56.03	43.97	70.15	63.66	36.34
September, 1893, .	71.19	28.81	84.62	109.23	*9.23
October, 1893, .	72.57	27.43	87.65	79.17	20.83
November, 1893, .	60.98	39.02	81.99	51.03	48.97
December, 1893, .	85.84	14.16	98.15	64.70	35.30
January, 1894, .	98.56	1.44	105.72	81.99	18.01
February, 1894, .	111.19	*11.19	108.64	110.92	*10.92
March, 1894, . .	114.93	*14.93	107.13	142.61	*42.61
April, 1894, . .	112.42	*12.42	107.69	103.30	*3.30
May, 1894, . .	92.03	7.97	100.89	62.37	37.63
June, 1894, . .	68.87	31.13	86.98	57.44	42.56
July, 1894, . .	57.05	42.95	72.33	43.24	56.76
August, 1894, . .	79.11	20.89	76.21	92.43	7.57

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
191	9.09	88.00	....	....	....	....	....	....
192	.78	105.00	....	....	....	....	....	....
193	15.58	100.00	....	25.00	40.00	....	....	....
194	3.64	140.00	....	10.00	10.00	....	....	....
195	7.79	55.00	....	....	33.33	....	....	....
196	....	100.00	....	....	....	....	....	....
197	14.03	66.00	10 to 15	....	....	....	....	....
198	18.18	66.00	....	....	....	....	....	....
199	1.04	109.00	....	....	....	....	....	....
200	43.90	25.00	....	....	....	....	....	....
201	....	75.00	....	....	....	....	....	....
202	....	66.00	5.00	....	....	....	....	....
203	....	100.00	....	....	....	....	....	....
204	27.01	100.00	....	....	....	....	....	....

HOSIERY AND KNIT GOODS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
205	82.00	100	100	100.00	....	....	....
206	78.93	150	150	100.00	\$ 4,542.11	\$3,411.17	75.10
207	48.69	200	127	63.50	6,500.00	3,378.93	51.98
208	52.88	80	88	63.33	1,216.18	840.53	69.11
209	70.39	150	140	93.33	5,512.00	4,475.53	81.20
210	39.81	163	79	48.47	5,200.45	2,718.85	52.28
211	60.63	170	119	70.00	5,402.50	3,227.40	59.74
212	61.64	680	535	78.68	15,994.44	12,243.62	76.58
213	95.33	90	90	100.00	3,150.00	2,663.51	84.58
214	....	160	133	83.13	7,390.59	5,144.57	69.65
215	43.36	120	53	44.17	2,790.00	1,260.80	48.77
216	92.06	160	154	96.25	5,025.00	4,643.58	92.41
217	100.00	260	306	117.69	8,700.00	9,261.33	106.45
218	92.01	105	98	93.33	3,482.00	3,126.20	89.78
219	83.23	175	148	84.57	4,500.00	3,786.45	84.14
220	49.32	140	71	50.71	3,299.27	1,694.79	51.37

PER CENT. HOURS, EMPLOYEES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	96.63	3.37	96.88	107.83	*7.83
July, 1893, . .	82.44	17.56	93.62	92.61	7.39
August, 1893, . .	82.86	17.14	89.91	94.99	5.01
September, 1893, .	64.74	35.26	71.35	67.31	32.69
October, 1893, .	66.28	33.72	73.92	66.72	33.28
November, 1893, .	64.08	35.92	78.36	66.94	33.06
December, 1893, .	56.35	43.65	80.54	64.42	35.58
January, 1894, .	64.25	35.75	76.90	62.18	37.82
February, 1894, .	64.93	35.07	75.99	64.76	35.24
March, 1894, . .	64.63	35.37	79.57	74.32	25.68
April, 1894, . .	73.53	26.47	82.07	74.18	25.82
May, 1894, . .	72.69	27.31	82.59	76.21	23.79
June, 1894, . .	71.69	28.31	80.33	77.52	22.48
July, 1894, . .	64.07	35.93	78.74	66.46	33.54
August, 1894, . .	62.73	37.27	77.52	65.51	34.49

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
205	4.47	80.00	10.00	....	....	....	....	....
206	13.25	75.00	....	....	....	....	....	....
207	16.10	51.00	....	....	....	....	....	....
208	22.86	88.00	....	10.00	75.00	....	....	....
209	29.62	75.00	....	4 to 7	50.00	....	....	....
210	27.01	50.00	....	....	....	....	....	....
211	16.62	65.00	10.00	....	....	....	....	....
212	8 05	69.00	....	5 to 8	6.00	....	....	....
213	4.68	100.00	5 to 20	....	....	....	....	....
214	....	65.00	....	....	....	....	....	....
215	.78	51.00	10.00	....	....	....	....	....
216	4.68	90.00	....	10.00	15.00	....	....	....
217	3.90	110.00	10.00	....	....	....	....	....
218	.52	108.00	....	....	....	....	....	....
219	1.56	90.00	7 to 10	....	....	....	....	....
220	16.36	55.00	10.00	....	....	....	....	....

MACHINE SHOPS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893 to August, 1894.		In 1892.	June, 1893 to Aug., 1894.	
221	53.37	184	178	96.74	\$8,517.50	\$7,490.97	87.95
222	54.34	65	63	96.92	3,700.00	3,142.73	84.94
223	74.37	20	16	80.00	700.00	516.67	73.81
224	35.88	25	12	48.00	1,400.00	597.07	42.65
225	63.90	80	80	100.00	5,675.00	3,775.82	66.53
226	67.92	75	56	74.67	4,170.00	3,043.55	72.99
227	100.00	35	65	185.71	2,409.84	3,582.91	148.68
228	100.00	17	24	141.18	957.50	1,209.11	126.28
229	100.00	13	19	146.15	690.00	1,030.88	149.40
230	59.15	20	18	90.00	850.00	503.40	59.22
231	50.79	77	43	55.84	4,255.66	2,672.61	62.80
232	86.14	100	90	90.00	6,000.00	5,156.73	85.95
233	91.17	66	60	90.90	4,500.00	4,138.40	91.96
234	79.33	822	755	91.85	44,105.12	35,991.80	81.60
235	63.44	100	75	75.00	3,900.00	2,700.00	69.23
236	93.51	70	69	98.57	3,500.00	3,233.33	92.38
237	53.29	500	500	100.00	38,317.72	27,679.10	72.24
238	55.31	84	57	67.86	3,257.39	2,375.41	72.68
239	76.36	155	122	79.35	7,734.00	7,002.35	90.54
240	54.63	110	67	60.91	6,470.00	2,897.73	44.79
241	78.15	667	519	77.81	35,679.00	28,480.84	79.83
242	34.72	193	115	59.59	7,863.90	3,321.24	42.23
243	58.12	88	88	66.52	5,312.33	3,533.50	66.52
244	71.57	60	45	75.00	3,583.33	2,598.16	72.51
245	80.35	59	52	88.14	2,950.00	2,618.21	88.75
246	55.94	150	116	77.33	5,239.39	4,184.54	79.87
247	65.01	300	219	73.00	17,000.00	10,405.24	61.21
248	....	500	....	....	30,000.00	23,466.67	78.22
249	73.56	75	63	84.00	3,516.00	2,665.48	75.81
250	60.90	161	102	63.35	5,916.00	3,782.03	63.93

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.—CONTINUED.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
251	49.17	100	65	65.00	\$5,500.00	\$2,959.24	53.80
252	57.63	354	221	62.43	16,469.38	10,081.05	61.21
253	58.46	52	42	80.77	2,515.00	1,820.33	72.38
254	25.31	75	25	34.67	3,897.52	1,077.37	27.64

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	98.53	1.47	101.69	105.88	*5.88
July, 1893, . .	75.53	24.47	95.28	82.80	17.20
August, 1893, . .	68.60	31.40	83.62	79.69	20.31
September, 1893, .	58.22	41.78	77.90	69.21	30.79
October, 1893, .	60.32	39.68	78.88	65.51	34.49
November, 1893, .	60.61	39.39	80.38	66.35	33.65
December, 1893, .	68.62	31.38	79.65	69.45	30.55
January, 1894, .	58.55	41.45	81.29	66.41	33.59
February, 1894, .	57.67	42.33	78.88	65.08	34.92
March, 1894, . .	66.53	33.47	80.48	79.17	20.83
April, 1894, . .	69.92	30.08	82.38	75.73	24.27
May, 1894, . .	68.04	31.96	80.59	77.27	22.73
June, 1894, . .	66.54	33.46	79.98	74.48	25.52
July, 1894, . .	63.65	36.35	77.90	66.54	33.46
August, 1894, . .	55.06	44.94	76.04	67.88	32.12

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tions.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
221	35.84	83.00	....	....	....	....	....	....
222	17.14	100.00	15.00	....	....	....	....	....
223	9.36	70.00	....	10.00	10.00	....	....	....
224	11.17	40.00	....	....	....	....	....	....
225	35.32	66.00	7.50	....	....	....	....	....
226	.78	73.00	....	....	....	....	....	....
227	....	150.00	....	....	....	....	....	....
228	....	125.00	....	....	....	....	....	....
229	....	140.00	....	10.00	5.00	....	20.00	15.00
230	24.42	60.00	....	....	....	....	....	10.00
231	.78	56.00	....	....	....	....	....	....
232	....	118.00	....	10 to 15	80.00	....	....	....
233	....	100.00	....	....	....	....	....	....
234	10.13	84.00	10.00	....	....	....	....	....
235	....	70.00	....	5 to 15	60.00	....	....	....
236	1.30	92.00	....	....	....	....	....	....
237	41.56	76.00	....	12.00	90.00	....	....	....
238	12.73	66.00	....	....	....	....	....	....
239	.52	85.00	10.00	....	....	....	....	....
240	14.03	75.00	15.00	....	....	....	....	....
241	....	100.00	....	....	....	....	....	....
242	22.60	60.00	....	....	....	....	....	....
243	16.62	62.00	....	....	....	....	....	....
244	2.86	75.00	....	12.50	30.00	....	....	....
245	4.94	84.00	....	....	....	....	....	....
246	18.44	77.00	....	10.00	15.00	....	....	....
247	....	66.00	10.00	....	....	....	....	....
248	....	66.00	10 to 15	....	....	....	....	....
249	6.23	80.00	10.00	....	....	....	....	....

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.—CONTINUED.

Number of Establishment.	Per Cent. Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
250	.26	66.00	5 to 20	....	....	....	....	....
251	8.05	56.00	10 to 20	....	....	....	....	....
252	2.34	66.00	....	....	....	....	....	....
253	10.65	69.00	7.50	....	....	....	....	....
254	53.77	25.00	....	....	....	....	....	....

MANUFACTURES OF COTTON GOODS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average Number in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
255	84.37	370	350	94.60	\$10,500.00	\$9,646.60	91.87
256	71.00	260	250	96.15	8,225.00	5,971.07	72.60
257	83.33	90	25	88.33	1,050.00	975.00	92.86
258	42.01	490	226	52.56	....	....	....
259	....	139	130	93.53	3,270.00	2,329.25	71.23
260	80.16	110	104	94.55	4,730.00	4,336.33	91.68

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	85.49	14.51	88.05	114.54	*14.54
July, 1893, . .	58.21	41.79	87.38	65.90	34.10
August, 1893, . .	64.77	35.23	84.91	93.45	6.55
September, 1893, . .	58.03	41.97	84.61	70.31	29.69
October, 1893, . .	76.72	23.28	82.30	88.17	11.83
November, 1893, . .	74.73	25.27	81.93	91.24	8.76
December, 1893, . .	54.13	45.87	80.73	71.68	28.32
January, 1894, . .	70.87	29.13	77.59	92.80	7.14
February, 1894, . .	76.06	23.94	79.46	97.25	2.75
March, 1894, . .	75.38	24.62	78.72	98.63	1.37
April, 1894, . .	69.92	30.08	78.12	85.57	14.43
May, 1894, . .	74.03	25.97	80.36	86.35	13.65
June, 1894, . .	58.50	41.41	79.54	94.20	5.60
July, 1894, . .	34.67	65.33	77.37	37.70	62.30
August, 1894, . .	52.00	47.92	74.46	67.83	32.17

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tion.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
255	10.65	88.00	...	....	....	....	....	....
256	25.97	70.00	....	....	....	....	....	....
257	....	88.00	....	....	....	....	....	....
258	14.81	60.00	....	10 to 25	75.00	....	....	....
259	42.86	75.00	10.00	....	....	....	....	....
260	8.57	87.50	....	....	....	....	....	....

MUSICAL INSTRUMENTS AND PARTS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892..	June, 1893, to Aug., 1894.	
261	52.40	90	47	52.22	\$3,865.20	\$1,859.37	48.11
262	49.75	358	238	66.48	14,395.02	7,542.91	52.39
263	41.54	280	156	55.71	13,185.58	8,298.53	62.94
264	46.26	50	25	50.00	1,800.00	998.73	55.49

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	65.92	34.08	81.49	78.68	21.32
July, 1893, . .	37.73	62.27	72.62	38.55	61.45
August, 1893, . .	26.89	73.11	43.70	27.95	72.05
September, 1893, .	28.18	71.82	48.59	31.69	68.31
October, 1893, .	39.62	60.38	48.71	39.73	60.27
November, 1893, .	38.39	61.61	51.03	51.71	48.29
December, 1893, .	42.91	57.09	51.41	58.74	41.26
January, 1894, .	38.22	61.78	52.44	47.79	52.21
February, 1894, .	42.27	57.73	53.86	55.66	44.34
March, 1894, . .	57.61	42.39	63.11	68.03	31.97
April, 1894, . .	60.10	39.90	66.84	73.35	26.65
May, 1894, . .	61.47	38.53	67.74	76.20	23.80
June, 1894, . .	59.33	40.67	66.20	59.10	40.90
July, 1894, . .	45.05	54.95	62.34	65.81	34.19
August, 1894, . .	54.71	45.29	68.51	70.61	29.39

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
261	....	50.00	....	10.00	50.00	....	....	....
262	19.74	50.00	....	....	....	....	....	....
263	13.51	67.00	5 to 20	....	....	....	....	....
264	5.45	60.00	10.00	....	....	....	....	....

PAPER MILLS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
265	83.59	85	77	90.59	\$3,725.00	\$3,184.67	85.49
266	79.48	35	35	100.00	1,540.00	1,266.67	82.25
267	82.99	50	49	94.23	1,750.00	1,318.17	75.32
268	97.72	101	106	104.95	3,695.67	3,800.85	102.85
269	45.78	28	16	57.14	1,000.00	519.59	51.96
270	83.33	50	50	100.00	1,786.00	1,588.07	88.92
271	86.95	100	96	96.00	2,500.00	2,284.20	91.37

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time	Per Cent. Less than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	96.72	3.28	97.33	93.42	6.58
July, 1893, . .	86.65	13.35	95.32	87.88	12.12
August, 1893, . .	74.70	25.30	89.31	78.41	21.59
September, 1893, .	65.86	34.14	93.10	71.92	28.08
October, 1893, .	83.83	16.17	93.99	86.28	13.72
November, 1893, .	86.49	13.51	95.10	89.80	10.20
December, 1893, .	82.72	17.28	94.43	88.50	11.50
January, 1894, . .	95.67	4.33	96.21	98.14	1.86
February, 1894, .	96.35	3.65	98.66	91.75	8.25
March, 1894, . .	93.63	6.37	98.89	97.17	2.83
April, 1894, . .	98.22	1.78	98.89	94.31	5.69
May, 1894, . .	93.65	6.35	96.44	95.12	4.88
June, 1894, . .	83.64	16.36	96.44	85.50	14.50
July, 1894, . .	82.18	17.82	91.54	77.74	22.26
August, 1894, .	73.95	26.05	95.55	73.17	26.83

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
265	....	85.00	10 to 15	....	....	....	....	....
266	20.52	80.00	....	....	....	....	....	....
267	17.92	85.00	10.00	....	....	....	....	....
268	12.47	102.00	....	7.00	25.00	....	....	....
269	20.52	50.00	....	....	....	....	....	....
270	16.62	88.00	....	....	....	....	....	....
271	10.13	88.00	5 to 12	....	....	....	....	....

PAPER BOXES AND ENVELOPES.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
272	36.08	100	48	43.00	\$3,100.00	\$1,778.33	57.37
273	70.31	90	74	82.22	2,608.00	1,947.67	74.68
274	100.00	40	45	112.50	1,200.00	1,253.53	104.42
275	81.75	400	327	81.75	15,000.00	12,250.00	81.67
276	64.67	75	88	90.66	2,001.00	1,642.14	82.06
277	75.51	150	129	86.00	4,300.00	3,416.67	79.43
278	100.00	125	134	107.20	4,175.00	4,359.89	104.43

PER CENT HOURS, EMPLOYES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	102.67	*2.67	100.30	106.13	*6.13
July, 1893, . .	65.21	34.79	70.71	61.15	38.85
August, 1893, . .	64.39	35.61	71.43	63.59	36.41
September, 1893, .	61.86	38.14	71.12	67.79	32.21
October, 1893, .	59.58	40.42	68.57	63.25	36.75
November, 1893, .	59.15	40.85	68.16	62.74	37.26
December, 1893, .	68.85	31.15	79.90	82.22	17.78
January, 1894, .	79.55	20.45	87.96	76.50	23.50
February, 1894, .	86.98	13.02	90.51	87.23	12.77
March, 1894, . .	88.31	11.69	93.37	99.08	.92
April, 1894, . .	90.55	9.45	92.45	88.86	11.14
May, 1894, . .	88.07	11.93	91.33	90.56	9.44
June, 1894, . .	87.89	12.11	92.24	103.04	*3.04
July, 1894, . .	86.80	13.20	92.24	82.20	17.80
August, 1894, . .	90.29	9.71	92.55	100.36	*.36

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
272	8.31	50.00	....	....	....	....	....	....
273	3.64	75.00	1 to 10	....	....	....	....	....
274	.13	110.00	....	....	....	....	20.00	8.00
275	....	81.00	....	....	....	....	....	....
276	17.66	86.00	....	....	....	....	....	....
277	4.93	75.00	....	....	....	....	....	....
278	....	105.00	....	....	....	....	....	....

PRINTING AND BOOK-BINDING.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
279	92.28	65	60	90.77	\$2,500.00	\$2,500.00	100.00
280	97.68	200	195	97.50	9,300.00	9,987.42	107.39
281	89.89	65	58	89.23	2,900.00	2,768.72	95.47
282	73.97	30	22	73.33	1,500.00	1,236.07	82.07
283	74.31	40	33	82.50	2,000.00	1,641.20	82.06
284	60.91	29	19	65.52	1,347.98	880.96	65.35

PER CENT. HOURS, EMPLOYES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	102.95	*2.95	102.80	109.29	*9.29
July, 1893, . .	100.99	*.99	100.93	115.48	*15.48
August, 1893, . .	92.76	7.24	92.77	94.03	5.97
September, 1893, .	88.97	11.03	89.04	105.15	*5.15
October, 1893, .	93.03	6.97	93.01	94.44	5.56
November, 1893, .	90.32	9.68	90.44	94.65	5.35
December, 1893, .	85.77	14.23	86.25	104.44	*4.44
January, 1894, .	82.21	17.79	83.92	87.67	12.33
February, 1894, .	88.15	11.85	88.34	93.45	6.55
March, 1894, . .	88.39	11.61	89.04	104.35	*4.35
April, 1894, . .	90.17	9.83	89.98	95.34	4.66
May, 1894, . .	89.92	10.08	91.38	94.14	5.86
June, 1894, . .	90.74	9.26	92.07	110.66	*10.66
July, 1894, . .	82.60	17.40	85.08	81.70	18.30
August, 1894, . .	75.58	24.42	78.32	74.26	25.74

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
279	105.00	....	....	...	....	....	....
280	105.00	....	....	....	....	....	....
281	90.00	....	....	....	....	....	....
282	75.00	....	....	....	....	....	....
283	2.08	78.00	....	....	....	....	...	....
284	66.00	....	....	....	....	....	....

RUBBER AND ELASTIC GOODS.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
285	92.87	44	46	104.55	\$2,228.40	\$2,093.45	93.94
286	67.24	245	164	66.94	6,526.00	4,303.00	65.94
287	.....	200	200	100.00	22,005.00	17,288.45	78.57
288	85.73	82	79	96.34	2,974.42	2,652.14	89.16
289	65.43	350	327	93.43	15,000.00	10,118.87	67.46
290	90.99	125	130	104.00	5,364.00	5,278.36	98.40
291	73.10	1,500	1,177	78.47	65,000.00	46,728.20	71.89
292	100.00	792	955	120.58	36,407.62	37,866.68	104.01
293	70.99	175	149	85.14	6,000.00	4,743.87	79.06
294	70.79	225	171	76.00	10,000.00	6,833.33	68.33
295	51.68	58	60	103.45	2,000.00	1,033.33	51.67

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	102.98	*2.98	102.55	100.77	*.77
July, 1893, . .	56.16	43.84	70.25	59.48	40.52
August, 1893, . .	51.79	48.21	68.08	55.78	44.22
September, 1893, .	66.38	33.62	82.32	66.31	33.69
October, 1893, .	83.46	16.54	94.59	78.09	21.91
November, 1893, .	86.89	13.11	97.79	93.17	6.83
December, 1893, .	87.92	12.08	98.23	84.54	15.46
January, 1894, .	89.13	10.87	98.48	81.34	18.66
February, 1894, .	81.79	18.21	97.27	77.75	22.25
March, 1894, . .	79.51	20.49	99.55	85.21	14.79
April, 1894, . .	58.92	41.08	69.56	62.32	37.68
May, 1894, . .	93.29	6.71	97.82	87.96	12.04
June, 1894, . .	99.37	.63	100.89	92.83	7.17
July, 1894, . .	97.36	2.64	100.89	83.66	16.34
August, 1894, . .	100.25	*.25	102.00	92.67	7.33

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduction. Per Cent. Em- ployes Affected.		Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
285	9.87	93.00	....	...	...	....	....	....
286	....	65.00	....	....	....	....	....	....
287	....	75.00	....	10 00	10.00	....	....	....
288	2.34	103.00	....	10 to 20	50.00	....	....	....
289	19.22	70.00	10.00	....	....	....	....	....
290	....	100.00	....	....	....	....	....	....
291	8.05	72.00	....	....	....	....	....	....
292	1.82	120.00	...	....	....	....	....	....
293	10.13	75.00	....	....	....	....	....	....
294	2.86	66.00	....	....	....	....	....	....
295	43.64	50.00	....	....	....	....	....	....

SILK.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
296	62.69	88	45	66.18	\$1,664.63	\$1,251.37	75.17
297	69.60	200	180	90.00	....	....	....
298	62.50	2,058	2,001	97.23	76,144.00	59,343.93	77.94
299	83.38	100	88	88.00	2,800.00	2,163.33	77.26
300	85.84	50	46	92.00	1,290.30	1,016.61	78.78
301	65.41	147	134	91.16	3,540.56	2,788.21	78.75
302	79.84	58	52	89.66	1,288.00	1,082.53	84.05
303	69.06	450	442	98.22	10,642.64	6,504.94	61.12
304	65.11	200	175	87.50	6,464.44	4,998.64	77.33
305	44.49	923 $\frac{1}{4}$	49	52.83	2,292.14	962.61	42.00
306	47.59	175	126	72.00	2,549.92	2,084.67	81.75
307	53.65	137	117	85.40	3,800.37	2,635.29	69.34

PER CENT. HOURS, EMPLOYES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	103.31	*3.31	105.01	105.21	*5.21
July, 1893, . .	75.07	24.93	102.97	87.54	12.46
August, 1893, . .	60.89	39.11	97.86	85.65	14.35
September, 1893, .	49.94	50.06	95.56	68.22	31.78
October, 1893, .	64.60	35.40	95.48	75.78	24.22
November, 1893, .	59.58	40.42	92.72	66.69	33.31
December, 1893, .	50.73	49.27	87.36	66.47	33.53
January, 1894, .	56.58	43.42	85.06	70.08	29.92
February, 1894, .	64.73	35.27	88.81	68.27	31.73
March, 1894, . .	62.49	37.51	90.17	75.33	24.67
April, 1894, . .	62.89	37.11	89.48	70.33	29.67
May, 1894, . .	67.93	32.07	90.33	77.43	22.57
June, 1894, . .	57.02	42.98	89.75	73.87	26.13
July, 1894, . .	54.39	45.61	88.76	66.85	33.15
August, 1894, . .	63.63	36.37	87.07	74.14	25.86

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
236	3.64	68.00	....	....	....	....	....	....
297	5.19	75.00	10.00	....	..	....	....	....
298	23.90	70.00	....	....	....	....	....	....
299	3.12	80.00	....	5.00	75.00	....	....	....
300	12.21	80.00	....	....	....	....	....	....
301	26.23	71.75	....	....	....	....	....	....
302	3.12	87.00	10.00	....	....	....	....	....
303	24.68	70.00	10.00	....	....	....	....	....
304	15.84	75.00	....	10.00	50.00	....	....	....
305	31.43	55.00	25.00	....	....	....	....	....
306	30.13	76.00	....	....	....	....	....	....
307	30.91	62.00	....	....	....	....	....	....

SILVER-PLATED WARE.

HOURS, EMPLOYES AND WAGES BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893. to Aug., 1894.	
308	57.02	93	84	90.32	\$4,911.63	\$3,302.90	67.25
309	49.64	165	126	76.36	8,440.52	4,879.71	57.81
310	28.40	26	12	46.15	1,033.50	746.68	72.25
311	60.27	225	210	93.33	8,300.00	6,342.87	76.42
312	70.07	130	119	91.54	7,061.00	4,951.53	69.93
313	53.79	233	209	89.70	11,100.00	7,790.12	70.18
314	59.66	475	321	67.58	20,854.38	15,830.09	75.91
315	34.04	75	39	52.00	3,250.00	1,505.88	46.33
316	97.20	30	30	100.00	1,200.00	1,237.87	103.16
317	56.71	290	236	81.38	10,800.00	7,925.06	73.38
318	81.37	112	112	100.00	7,224.33	4,993.67	69.12
319	65.71	130	113	86.92	5,400.00	3,940.59	72.97
320	97.02	50	50	100.00	1,200.00	1,200.00	100.00
321	62.09	130	99	76.15	5,596.37	4,342.04	77.59
322	53.87	275	270	98.18	13,364.30	8,643.01	64.67
323	63.18	70	66	94.29	2,865.00	2,885.33	100.71
324	80.00	100	80	80.00	4,000.00	3,160.00	79.00
325	....	1,012	946	93.48	52,370.47	35,873.85	68.50
326	54.02	400	367	91.75	19,000.00	10,060.00	52.95

PER CENT. HOURS, EMPLOYEES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	84.85	15.15	95.97	94.52	5.48
July, 1893, . .	46.84	53.16	82.96	46.94	53.06
August, 1893, . .	50.76	49.24	88.71	70.02	29.98
September, 1893, .	58.83	41.17	89.93	67.45	32.55
October, 1893, .	74.02	25.98	91.94	80.16	19.84
November, 1893, .	84.07	15.93	95.32	95.79	4.21
December, 1893, .	65.43	34.57	93.78	94.42	5.58
January, 1894, .	41.26	58.74	76.18	42.97	57.03
February, 1894, .	53.81	46.19	86.99	62.03	37.97
March, 1894, . .	55.51	44.49	87.32	66.54	33.46
April, 1894, . .	60.04	39.96	86.32	66.45	33.55
May, 1894, . .	55.90	44.10	85.03	69.11	30.89
June, 1894, . .	51.41	48.59	85.30	68.02	31.98
July, 1894, . .	37.66	62.34	79.93	39.33	60.67
August, 1894, . .	57.91	42.09	85.43	77.91	22.09

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion of Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. of Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
308	34.03	80.00	....	....	....	....	....	....
309	30.65	75.00	....	10.00	25.00	....	....	....
310	49.61	82.20	....	....	....	....	....	....
311	31.16	75.00	....	10.00	10.00	....	....	....
312	19.06	70.00	....	....	....	....	....	....
313	35.32	86.75	....	....	....	....	....	....
314	15.59	75.00	....	10.00	20.00	....	10.00	2.00
315	16.88	52.00	....	....	....	....	....	....
316	7.01	105.00	....	....	....	....	5.00	50.00
317	8.57	90.00	....	....	....	....	....	....
318	14.80	80.00	....	10 to 12.50	80.00	....	....	....
319	23.38	85.00	....	....	....	....	....	....
320	8.31	100.00	....	....	....	....	25.00	10.00
321	12.21	85.00	10 to 20	....	....	....	....	....
322	37.40	65.00	....	....	....	....	....	....
323	22.08	101.00	....	....	....	....	....	....
324	....	95.00	....	....	....	....	....	....
325	....	80.00	....	....	....	....	5 to 25	15.00
326	20.00	66.00	....	....	....	....	....	....

STONE CUTTING.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
327	40.48	246	139	52.44	\$8,936.06	\$4,639.54	51.92
328	100.00	19	25	131.58	790 13	1,013.44	128.26
329	27.12	235	105	44.68	9,000.00	3,311.86	36.80
330	46.57	212	146	68.87	8,556.99	5,361.37	62.65
331	92.82	35	36	102.86	2,500.00	2,381.33	97.25
332	28.76	130	50	38.46	5,324.78	1,902.78	35.73
333	50.44	90	64	71.11	4,000.00	2,114.55	52.86
334	100.00	26	35	134.62	1,300.00	2,125.47	163.50
335	76.31	290	282	100.69	9,800.00	9,824.00	100.24
336	55.47	200	112	56.00	6,000.00	3,491.80	58.19

PER CENT. HOURS, EMPLOYES AND WAGES BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	96.39	3.61	108.36	124.07	*24.07
July, 1893, . .	84.50	15.50	105.93	109.68	*9.68
August, 1893, . .	68.93	31.07	100.88	92.73	7.27
September, 1893, .	72.45	27.55	96.97	98.86	1.14
October, 1893, .	73.02	26.98	84.63	80.76	19.24
November, 1893, .	62.63	37.37	80.24	70.07	29.93
December, 1893, .	35.42	64.58	52.93	41.22	58.78
January, 1894, .	15.46	84.54	20.43	19.02	80.98
February, 1894, .	11.58	88.42	18.34	12.49	87.51
March, 1894, . .	14.11	85.89	20.16	19.75	80.25
April, 1894, . .	40.94	59.06	56.91	51.89	48.11
May, 1894, . .	48.98	51.02	63.79	62.28	37.72
June, 1894, . .	52.94	47.06	64.80	64.81	35.19
July, 1894, . .	46.74	53.26	66.01	51.39	48.61
August, 1894, . .	56.13	43.87	64.78	65.80	34.20

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
327	40.78	75.00	10 to 15	....	....	....	....	....
328	22.34	133.00	....	....	....	....	....	....
329	49.09	50.00	10 to 15	....	....	....	....	....
330	36.88	65.00	10 to 15	....	....	....	....	....
331	7.79	90.00	....	20.00	50.00	....	....	....
332	24.68	66.00	15.00	....	....	....	....	....
333	33.25	90.00	5 to 15	....	....	....	....	....
334	....	145.00	....	....	....	....	....	....
335	....	100.00	....	8.00	5.00	....	....	....
336	16.62	55.00	12.00	....	....	....	....	....

TWINE.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
337	77.20	66	59	89.39	\$1,345.00	\$1,409.47	104.79
333	86.59	35	35	100.00	684.40	643.56	94.03
330	74.66	37	52	86.49	760.00	643.00	84.61
340	81.28	37	37	100.00	950.00	776.27	81.71

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . . .	96.09	3.91	97.71	111.12	*11.12
July, 1893, . . .	82.84	17.16	97.14	96.77	3.23
August, 1893, . .	86.55	13.45	98.29	104.91	*4.91
September, 1893, .	80.55	19.45	86.86	92.66	7.34
October, 1893, . .	72.39	27.61	86.86	91.64	8.36
November, 1893, .	80.78	19.22	92.57	88.05	11.95
December, 1893, .	75.27	24.73	92.57	84.42	15.58
January, 1894, . .	79.90	20.10	92.57	95.14	4.86
February, 1894, . .	83.05	16.95	90.86	87.06	12.94
March, 1894, . . .	82.04	17.96	93.14	97.59	2.41
April, 1894, . . .	83.62	16.38	92.57	92.56	7.44
May, 1894,	80.44	19.56	93.14	91.50	8.50
June, 1894,	73.72	26.28	91.43	85.58	14.42
July, 1894,	69.93	30.07	90.86	79.96	20.04
August, 1894, . . .	68.64	31.36	90.29	93.91	6.09

* Increase.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
337	5.19	110.00	....	....	....	....	....	....
338	14.29	105.00	....	10 00	50.00	....	....	....
339	8.83	90.00	....	....	....	....	....	....
340	18.70	80.00	....	10.00	30.00	....	....	....

WIRE AND WIRE GOODS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893. to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
341	51.72	150	84	56.00	\$6,000.00	\$3,265.51	54.43
342	98.42	33	34	103.03	1,240.00	1,077.91	86.93
343	100.00	25	25	100.00	1,894.73	1,894.73	100.00

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	89.42	10.58	89.42	84.65	15.35
July, 1893, . .	73.65	26.35	76.44	67.45	32.55
August, 1893, . .	64.56	35.44	76.92	66.92	33.08
September, 1893, .	52.75	47.25	71.63	51.06	48.94
October, 1893, .	59.47	40.53	64.90	63.55	36.45
November, 1893, .	63.22	36.78	66.83	63.64	36.36
December, 1893, .	59.86	40.14	63.46	60.55	39.45
January, 1894, .	56.01	43.99	59.13	65.87	34.13
February, 1894, .	62.02	37.98	62.02	63.57	36.43
March, 1894, . .	65.87	34.13	65.87	72.09	27.91
April, 1894, . .	64.42	35.58	64.42	70.61	29.39
May, 1894, . .	64.90	35.10	64.90	74.27	25.73
June, 1894, . .	65.38	34.62	65.38	70.66	29.34
July, 1894, . .	66.35	33.65	66.35	66.52	33.48
August, 1894, . .	65.44	34.56	69.71	75.30	24.70

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
341	1.56	55.00	25.00	....	....	....	....	....
342	4.68	100.00	....	15.00	20.00	....	15.00	20.00
343	....	100.00	....	....	....	....	...	....

WOOD WORKING.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
344	77.42	108	87	80.56	\$6,227.91	\$4,394.14	70.56
345	100.00	110	125	113.64	5,564.80	4,965.73	89.23
346	81.21	90	75	83.33	4,239.99	4,284.80	101.06
347	49.34	295	238	80.68	12,300.00	7,103.97	57.76
348	93.33	45	42	93.33	2,000.00	1,880.00	94.00

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	98.79	1.21	104.17	108.00	*8.00
July, 1893, . .	72.18	27.82	103.24	77.33	22.67
August, 1893, . .	83.01	16.99	102.93	92.95	7.05
September, 1893, .	68.80	31.20	92.13	73.58	26.42
October, 1893, .	69.03	30.97	90.28	80.24	19.76
November, 1893, .	65.35	34.65	87.35	71.82	28.18
December, 1893, .	55.54	44.46	84.41	75.32	24.68
January, 1894, .	43.52	56.48	81.48	49.75	50.25
February, 1894, .	64.99	35.01	75.77	61.02	38.98
March, 1894, . .	69.95	30.05	79.63	58.60	41.40
April, 1894, . .	77.98	22.02	85.80	80.21	19.79
May, 1894, . .	75.75	24.25	84.88	74.05	25.95
June, 1894, . .	73.74	26.26	85.03	77.82	22.18
July, 1894, . .	66.79	33.21	78.86	66.59	33.41
August, 1894, . .	67.42	32.58	78.70	71.73	28.27

* Increase.

WOOLEN GOODS.

HOURS, EMPLOYES AND WAGES, BY ESTABLISHMENTS.

Number of Establishment.	Per Cent. Hours Worked of Full Time.	AVERAGE NUMBER EMPLOYED.		Per Cent. Average Number Employed of Average in 1892.	AVERAGE MONTHLY PAY- MENTS IN WAGES.		Per Cent. Monthly Average Wages Paid of Average in 1892.
		In 1892.	June, 1893, to August, 1894.		In 1892.	June, 1893, to Aug., 1894.	
349	45.33	1,653	1,443	87.30	\$41,951.39	\$25,385.19	60.51
350	59.16	135	96	71.11	3,500.00	1,960.00	56.00
351	69.00	150	103	68.67	4,482.91	2,945.84	65.71
352	89.77	343	503	89.80	11,137.00	8,094.33	72.68
353	66.34	190	149	78.42	6,950.00	4,429.73	63.74
354	....	200	81	40.50	6,325.00	2,448.00	38.70
355	93.61	80	80	100.00	3,005.54	2,471.80	82.24
356	95.69	150	150	100.00	4,500.00	4,213.33	93.63
357	86.45	125	108	86.40	4,000.00	3,466.67	86.67
358	87.32	40	35	87.50	1,200.00	1,040.00	86.67
359	....	56	46	82.14	2,000.00	1,511.07	75.55
360	....	205	116	56.59	5,000.00	2,416.86	48.34
361	72.53	100	79	79.00	3,914.89	2,613.65	66.76
362	35.00	339	135	39.82	10,050.18	3,728.65	37.10
363	72.75	350	288	82.29	9,000.00	6,666.67	74.07
364	64.66	70	50	71.43	2,500.00	1,424.46	56.97
365	70.78	113	83	73.45	3,521.23	2,682.94	76.19
366	48.01	18	31	64.58	1,643.94	773.91	47.08
367	61.72	90	18	60.00	1,241.00	866.24	69.80
368	75.72	50	18	96.00	1,524.00	1,085.27	71.21
369	71.80	32	26	81.25	1,100.00	756.49	68.77
370	69.01	95	72	75.79	3,600.00	2,345.81	65.16
371	56.03	200	145	72.50	6,000.00	4,309.20	71.82
372	60.08	45	33	73.33	1,700.00	1,165.68	68.57
373	76.57	100	100	100.00	3,526.12	2,899.72	82.24
374	54.55	85	40	54.12	2,450.00	1,266.00	51.67
375	25.45	135	31	22.96	4,000.00	800.00	17.25
376	40.25	200	168	56.00	9,072.00	4,572.11	50.40
377	68.83	36	29	80.56	1,300.00	821.67	63.21
378	23.46	80	30	37.50	2,800.00	930.04	33.22

PER CENT. HOURS, EMPLOYES AND WAGES, BY MONTHS.

MONTHS.	Per Cent. Hours Worked of Full Time.	Per Cent. Less Than Full Time.	Per Cent. Number Employed of Average Number in 1892.	Per Cent. Wages Paid of Average Monthly Payments in 1892.	Per Cent. Decrease in Wage Payments.
June, 1893, . .	88.19	11.81	86.56	91.42	8.58
July, 1893, . .	70.65	29.35	87.28	76.21	23.79
August, 1893, . .	54.62	45.38	70.80	61.44	38.56
September, 1893, .	37.31	62.69	61.95	42.45	57.55
October, 1893, .	43.88	56.12	57.89	43.42	56.58
November, 1893, .	46.99	53.01	55.89	57.58	42.42
December, 1893, .	59.89	40.11	82.20	60.56	39.44
January, 1894, .	52.20	47.80	76.04	57.14	42.86
February, 1894, .	53.92	46.08	74.07	54.13	45.87
March, 1894, . .	56.98	43.02	80.51	64.84	35.16
April, 1894, . .	64.45	35.55	81.16	65.03	34.97
May, 1894, . .	66.46	33.54	79.26	72.14	27.86
June, 1894, . .	66.61	33.39	76.17	64.75	35.25
July, 1894, . .	52.45	47.55	70.95	51.81	48.19
August, 1894, . .	52.97	47.03	64.21	57.42	42.58

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
				Per Cent.	Per Cent. of Reduc- tions.		Per Cent.	Per Cent. of In- crease.
					Per Cent. Em- ployes Affected.			Per Cent. Em- ployes Affected.
349	42.86	60.00	1 to 25	....	....	....	....	....
350	26.75	66.00	*20.00	....	....	....	....	....
351	....	60.00	....	....	....	....	....	....
352	....	80.00	25.00	....	....	12.50	....	....
353	26.75	70.00	10.00	....	....	....	....	....
354	....	40.00	5 to 20	10.00	90.00	....	....	....
355	2.59	90.00	1 to 10	....	....	....	....	....
356	4.15	100.00	....	10 to 15	93.00	....	....	....
357	13.51	85.00	....	....	....	....	....	....
358	14.03	85.00	....	5.00	33.33	....	....	....
359	23.38	75.00	....	....	....	....	....	....
360	....	65.00	10.00	....	....	....	....	....
361	22.34	75.00	....	....	....	....	....	....
362	31.69	45.00	10 to 20	....	....	....	....	....
363	1.56	70.00	....	....	....	....	....	....
364	10.91	66.00	10 to 20	....	....	....	....	....
365	23.38	75.00	....	5 to 10	35.00	....	....	....
366	36.62	52.00	10 to 15	....	....	....	....	....
367	8.05	70.00	....	10.00	16.67	....	....	....
368	20.52	82.00	10.00	....	....	....	....	....
369	8.31	75.00	10.00	....	....	....	....	....
370	30.65	60.00	....	....	....	....	....	....
371	23.64	63.00	....	....	....	....	....	....
372	22.34	70.00	12.50	....	....	....	12.50	16.00

* Ten per cent. of reduction restored September 1, 1894.

IDLE DAYS, PRODUCTION AND CHANGES IN WAGE RATES.—CONTINUED.

Number of Establishment.	Per Cent. Number Idle Days of Work- ing Days.	Per Cent. Produc- tion in Last Fis- cal Year of That in 1892.	CHANGES IN WAGE RATES.					
			Reductions.			Increases.		
			General.	Partial.		General.	Partial.	
			Per Cent.	Per Cent. of Reduc- tion.	Per Cent. Em- ployes Affected.	Per Cent.	Per Cent. of In- crease.	Per Cent. Em- ployes Affected.
373	20.00	80.00	...	....	....	....	....	....
374	26.75	66.00	10.00	....	....	....	....	....
375	74.55	40.00	10.00	....	....	....	....	....
376	41.82	52.00	....	....	....	....	....	....
377	31.17	75.00	....	7 to 10	75.00	....	....	....
378	62.86	40.00	20.00	....	....	....	....	....

CHILD-LABOR.

The subject of child-labor, treated at some length in previous reports of this Bureau, including the report for 1893, is of sufficient importance to demand further consideration, and a marshaling of such additional facts and arguments as have been found available.

It is an important subject, considered either from the social or from the economic standpoint. In its social aspect—in the intimate connection between child-labor and education—the subject is given added importance by recent serious happenings in our country. The relation is obvious. The higher the standard of intelligence in a community, the better appreciation there is of liberty as distinguished from license, the better understanding of rights and of obligations, and the greater regard for law and order, which is simply the protection of individual rights. To the contrary result, ignorance, which is the effect of domestic neglect, may contribute as well as imported ignorance. With regard to the former, the State responsibility is manifest and serious. The perpetuity of the State, of a republican form of government, is involved.

TRAINING FOR CITIZENSHIP.

Our form of government presupposes intelligence on the part of the many who govern—the citizens, and the schools were established to train prospective citizens for the discharge of the duties of citizenship. Remembering the importance of those duties, the further proposition that the best and greatest possible use be made of the means of training for citizenship needs no supporting argument. The longer the child can be kept at school—consistent with his growing obligation as a worker in the public hive—the better citizen he is likely to become. Herein exists the connection

between this phase of the subject and the law which fixes the age limit of employment at thirteen years. That law permits short-sighted or avaricious parents to send from school to factory many children at the most impressionable age, at an age when an additional year in school would be worth more to them, and to the State, than any two or three years of school life preceding. The children should have that additional year for mental, moral and physical growth. It would involve no great sacrifice. Indeed, in comparison with the important results sought, affecting not alone the life of the citizen, but the best life of the State, it seems a small thing to ask that the age limit of employment be raised one year, to fourteen.

IGNORANCE AN ECONOMIC WASTE.

To permit any number of children—even a small number—to grow up in ignorance, is an injustice to the children, for which the State may pay dearly. It is an economic waste, positive in the possibilities that are lost, and negative in the resultant cost of poverty and crime. In a democracy it is a moral sin and a lamentable short-sightedness. Governor Washburne, of Massachusetts, in his annual message to the legislature in 1874, well said on this subject:

“The assumption of our laws is that the highest intelligence is the highest good of the entire people. Ignorance is dwarfing to the individual and dangerous to society. It is wiser economy to sustain the common school than the reform school, the normal school than the house of correction, the college than the penitentiary. The State assumes that the physical, mental and moral treasures, embraced in what we call childhood, are so much capital belonging to the community as well as to the parents. And it has been well said that the State undertakes to provide for, invest, develop and look after this childhood treasure in such a way that it shall pay the highest dividends to the Commonwealth. No distinction of outward condition, whether it be of wealth or poverty, of birth or race, can be allowed to interfere with the purposes of the State. She claims the right and responsibility of providing a good common school education for every child within her borders, at the public expense. She starts them all upon the highway toward useful and honorable manhood and womanhood.”

HOW MANY ACQUIRE A COMMON SCHOOL EDUCATION?

By a common school education, as the phrase is generally understood, is meant not merely a little knowledge of reading, writing and arithmetic, but the application of those elements of knowledge

in the branches taught in the grammar school grades. It is certainly not asking too much that each child should have the opportunity to acquire a grammar school education. The high school may be for the few, as some argue, but the grammar school should be for all. It is not too much to ask that a common school, or a grammar school, education be part of the capital of each child as it starts upon the life-work. That, with the added physique acquired through the abstention from toil and confinement in a factory, will better fit the child to be a worker and a citizen.

What proportion of children acquire, or have the opportunity to acquire a common school education? In the report of the Secretary of the Connecticut Board of Education for 1892-'93, it is said: "Last year in one town 584 entered the primary schools. In the grammar schools representing the eighth year there were 98. * * * Barely 100 at the age of twelve to fifteen have secured a common school education." Not one-fifth. In a further pursuit of this branch of the subject, an inquiry was addressed by this Bureau to the principals of the grammar schools in the State. Many of them courteously and promptly replied, and the replies have been tabulated by counties, towns and schools, as follows:

HARTFORD COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890	1891	1892	1893	1894
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
Hartford, . . .	Arsenal, . . .	15 10	....	15 6	14 11	14 9
" . . .	Charter Oak Avenue,	14	13	13	13	13
" . . .	1st District, . .	....	..	....	14 6	15
" . . .	Northwest, . .	....	15 5	15 4	14 1	14 1
" . . .	Parkville, . . .	13 10	13 9	13 5	14	13 6
" . . .	2d North, . . .	15	15 1	15 3	15 4	15 4
" . . .	South, . . .	15 4	15 2	15 1	15 2	15 5
" . . .	Washington Street,	14 6	14 8.	14 6	15	14 2
" . . .	West Middle District,	15 4	15	15 2	14 10	15 1
Berlin, . . .	No. 2, . . .	....	....	....	13	13
Bristol, . . .	3d District, . .	14 6	14 6	14	13 9	13 6
East Hartford, . .	2d South District, .	....	....	....	....	13
Glastonbury, .	District No. 2, . .	....	....	....	....	13
Manchester, . .	District No. 8, . .	....	....	14	14	14 6
New Britain, . .	Lincoln, . . .	....	....	..	....	14 6
" . . .	Grade 9, Grammar, .	14 5	....	....	15	15
" . . .	Northend, . . .	....	....	..	....	13
Plainville, . . .	Graded, . . .	....	....	....	....	....
Simsbury, . . .	Tariffville, . . .	....	....	....	....	14
Southington, . .	4th District, . .	....	....	....	14 8	15
Suffield, . . .	Center District, .	14	14	14	14	14
" . . .	West Center, . .	....	....	....	....	14

HARTFORD COUNTY.	SCHOOL.	Per Cent. Not Com- pleting Grammar School Course.	Per Cent. Leaving School Upon At- taining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
Hartford, . .	Arsenal, . . .	75.00	60.00	9	5 and 6
" . .	Charter Oak Ave.,	33.33	10.00	8	7 and 8
" . .	1st District, . .	80.00	....	....	6 and 7
" . .	Northwest, . .	8.00	6.00	9	8
" . .	Parkville, . .	40.00	....	8	7 and 8
" . .	2d North, . .	85.00	75.00	9	6 and 7
" . .	South, . . .	25.00	10.00	9	7, 8 and 9
" . .	Washington St.,	4.00	....	9	9
" . .	West Middle Dist.,	....	10.00	....	7 and 8
Berlin, . .	No. 2, . . .	....	....	2	....
Bristol, . .	3d District, . .	45.00	80.00	10	6, 7 and 8
East Hartford, .	2d South District,	....	4.00	2	2
Glastonbury, .	District No. 2, .	33.00	....	2	2
Manchester, .	District No. 8, .	33.00	25.00	9	8 and 9
New Britain, .	Lincoln, . . .	6.00	3.00	8	7
" . .	Grade 9, Grammar,	....	....	1	....
" . .	Northend, . .	20.00	20.00	7	5, 6 and 7
Plainville, . .	Graded, . . .	33.33	5.00	....	....
Simsbury, . .	Tariffville, . .	10.00	....	2	2
Southington, .	4th District, . .	....	....	11	6 and 7
Suffield, . .	Center District, .	17.00	10.00	3	2
" . .	West Center, .	20.00	20.00	....	7 and 8

NEW HAVEN COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
New Haven, . .	Dwight, . . .	....	14 7	14 2	14 5	14 11
" . .	Eaton, . . .	15	15 2	15 2	14 2	15 3
" . .	Hamilton, . .	13	13	14	14	14
" . .	Lovell, . . .	15	14 9	14 9	14 10	15
" . .	Westville, . .	....	....	15 10	14 8	15 6
" . .	Woolsey, . . .	15 5	15 7	15 4	15 6	15 8
" . .	Wooster, . . .	14 11	14 6	14 6	14 7	14 8
Waterbury, . .	All, . . .	....	15 10	14 11	15 2	....
Derby, . . .	Franklin, . .	....	14 5	....	15	14
" . . .	6th District, .	13 6	14 10	14 2	14 6	14 10
Meriden, . . .	Center, . . .	....	....	14 6	14 4	14 7
Meriden, . . .	Prattsville, .	15	15	15	15	15
North Haven, .	District No. 3, .	....	....	15	14	13

NEW LONDON COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
New London, . .	Division No. 2, .	13	13	13	13	13
" . . .	Nathan Hale. . .	14	14	14 6	14 6	14
Norwich, . . .	Broadway, . . .	....	....	....	....	15 7
" . . .	Greenville, . .	....	....	15	15	15 3
" . . .	Wequonnoc, . .	14	14	14	14	14
" . . .	West Town Street .	....	15	15	15	14
Colchester, . . .	1st District, . .	....	13 6	14	13 6	13 6
Groton, . . .	District No. 11, .	....	....	....	15	15
Stonington, . .	9th District, . .	....	....	....	16	17
" . . .	16th District, .	....	....	....	....	14
Waterford, . . .	6th District, . .	13	13	13	13	13

NEW HAVEN COUNTY.	SCHOOL.	Per Cent. not Com- pleting Grammar School Course.	Per Cent. Leaving School upon at- taining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
New Haven, . .	Dwight, . .	25.00	2.00	8	7 and 8
" . .	Eaton, . .	50.00	25.00	8	5 and 6
" . .	Hamilton, . .	33.00	3.00	8	5, 6, 7 and 8
" . .	Lovell, . .	80.00	50.00	....	5, 6 and 7
" . .	Westville, . .	58.00	40.00	8	6 and 7
" . .	Woolsey, . .	80.00	....	8	....
" . .	Wooster, . .	85.00	73.00	8	4 and 5
Waterbury, . .	All, . .	....	....	8	6 and 7
Derby, . .	Franklin, . .	13.00	....	4	4
" . .	6th District, . .	....	....	8	6 and 7
Meriden, . .	Center, . .	37.00	....	....	....
" . .	Prattville, . .	....	....	9	6, 7 and 8
North Haven, . .	District No. 3,	12.00	....	8	8

NEW LONDON COUNTY.	SCHOOL.	Per Cent. not Com- pleting Grammar School Course.	Per Cent. Leaving School upon at- taining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
New London, . .	Division No. 2,	....	25.00	8	6, 7 and 8
" . .	Nathan Hale,	20.00	10.00	....	7 and 8
Norwich, . .	Broadway, . .	51.00	15.00	9	....
" . .	Greenville, . .	70.00	50.00	10	7, 8 and 9
" . .	Wequonnoc, . .	96.00	96.00	9	7, 8 and 9
" . .	West Town St.,	66.00	33.00	....	....
Colchester, . .	1st District, . .	10.00	10.00	9	7, 8 and 9
Groton, . .	District No. 11,	50.00	75.00	10	9 and 10
Stonington, . .	9th District, . .	60.00	50.00	12	6, 7 and 8
" . .	16th District,	25.00	10.00	10	8 and 9
Waterford, . .	6th District, . .	87.00	90.00	8	5 and 6

FAIRFIELD COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
Bridgeport, . .	Clinton Ave., . .	....	....	....	....	13
" . .	Grand Street, . .	13 7	13 5	12 7	13 7	13 8
" . .	No. 11, . . .	....	....	....	....	13 6
" . .	Prospect Street, .	....	....	....	....	15
" . .	Barnum, . . .	....	....	....	14 8	14 7
Danbury, . . .	South Center, . .	....	....	....	14	15
Darien, . . .	Noroton District, .	....	....	16	16	14 10
Greenwich, . .	Center, . . .	....	....	....	....	16 1
" . .	East Portchester, .	....	....	....	....	14
" . .	Glenville, . . .	....	....	....	....	....
" . .	Sound Beach, . .	....	....	15	....	....
Huntington, . .	Ferry District, .	....	....	....	....	....
Newtown, . . .	Sandy Hook, . . .	....	....	14 9	14	15
Norwalk, . . .	E. Norwalk District,	....	....	14 8	14 6	15 6
Stamford, . . .	Elm Street, . . .	15	15 6	14 9	14 6	14 6
" . . .	Henry Street, . .	....	....	....	13 9	14 10
" . . .	All,	14	14 3	14 7	15	15
" . . .	William Street, .	...	....	....	....	15 10

WINDHAM COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
Brooklyn, . . .	District No. 9, .	....	....	14	16	14
Killingly, . . .	Ballouville No. 9, .	....	17	17	16	15
"	Dayville No. 6, .	....	....	....	....	15
"	District No. 7, .	....	....	....	....	14
Plainfield, . . .	Moosup, . . . .	....	....	....	....	15
Thompson, . . .	District No. 7, . .	....	....	14	14	13
Windham, . . .	1st District, . .	....	....	....	....	15 2
"	Natchaug, . . .	....	14 6	13 1	13 6	14

FAIRFIELD COUNTY.	SCHOOL.	Per Cent. not Completing Grammar School Course.	Per Cent. Leaving School upon attaining 13th year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
Bridgeport, . .	Clinton Ave.,	10 00	5.00	8	7
" . .	Grand Street,	90.00	....	7	5, 6 and 7
" . .	No. 11, . .	....	25.00	6	5 and 6
" . .	Prospect St., .	50.00	40.00	8	6 and 7
" . .	Barnum, . .	16.00	....	9	7
Danbury, . . .	South Center,	90.00	25.00	10	9 and 10
Darien, . . .	Noroton Dist.,	6.00	6.00	4	4
Greenwich, . .	Center, . .	....	....	11	....
" . .	E. Portchester,	....	....	4	....
" . .	Glenville, .	100.00	100.00	....	....
" . .	Sound Beach,	33.00	50.00	2	2
Huntington, . .	Ferry Dist., .	40.00	....	10	7 and 8
Newtown, . . .	Sandy Hook,	20.00	10.00	3	....
Norwalk, . . .	E. Nor. Dist.,	55.00	50 00	9	7 and 8
Stamford, . . .	Elm Street, .	90.00	75.00	9	7, 8 and 9
" . . .	Henry Street,	98.00	85.00	9	7, 8 and 9
" . . .	All, . . .	40.00	30.00	9	7, 8 and 9
" . . .	William Street.	66.67	16.25	9	7, 8 and 9

WINDHAM COUNTY.	SCHOOL.	Per Cent. not Completing Grammar School Course.	Per Cent. Leaving School upon attaining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
Brooklyn, . . .	District No. 9,	33.00	....	3	2 and 3
Killingly, . . .	Ballouy'l No. 9,	55.00	45.00	5	4 and 5
" . . .	Dayville No. 6,	35.00	....	3	...
" . . .	District No. 7,	50.00	50.00	8	2 and 3
Plainfield, . . .	Moosup, . .	90.00	80.00	8	4 and 5
Thompson, . . .	District No. 7,	90.00	95.00	2	2
Windham, . . .	1st District, .	66.00	50.00	7	5 and 6
" . . .	Natchaug, .	50.00	75.00	8	6, 7 and 8

LITCHFIELD COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
Canaan, . . .	District No. 2, . .	16	16	15	15	15
New Hartford, . .	Grammar, . .	....	....	....	15	14
Plymouth, . . .	District No. 2, . .	....	....	....	....	....
Salisbury, . . .	District No. 7, . .	....	....	....	....	....
Watertown, . . .	Center District, .	16	16	15	15 6	15
Winchester, . . .	District No. 1, . .	....	....	14	15	15

MIDDLESEX COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
Middletown, . . .	Mills Farms, . .	14	13	13	13	12
Chester, . . .	South District, .	....	....	....	...	....
Portland, . . .	Central No. 2, . .	....	....	....	14 8	14 2

TOLLAND COUNTY.	SCHOOL.	AVERAGE AGE AT WHICH PUPILS COM- PLETED HIGHEST GRAMMAR GRADE.				
		1890.	1891.	1892.	1893.	1894.
		Y. M.	Y. M.	Y. M.	Y. M.	Y. M.
Coventry, . . .	District No. 1, . .	....	....	....	....	17
Rockville, . . .	.....	....	13	....	....	11

LITCHFIELD COUNTY.	SCHOOL.	Per Cent. not Com- pleting Grammar School Course.	Per Cent. Leaving School upon at- taining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
Canaan, . . .	District No. 2,	33.00	....	11	2
New Hartford, .	Grammar, .	14.00	5.00	2	1
Plymouth, . .	District No. 2,	12.00	10.00	5	4 and 5
Salisbury, . .	District No. 7,	50.00	30.00	9	7, 8 and 9
Watertown, . .	Center Dist.,	60.00	25.00	4	4
Winchester, . .	District No. 1,	75.00	50.00	9	7 and 8

MIDDLESEX COUNTY.	SCHOOL.	Per Cent. not Com- pleting Grammar School Course.	Per Cent. Leaving School upon at- taining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
Middletown, . .	Mills Farms, .	50.00	10.00	12	....
Chester, . . .	South Dist., .	20.00	10.00	....	10 and 11
Portland, . . .	Central No. 2,	96.00	33.33	8	6, 7 and 8

TOLLAND COUNTY.	SCHOOL.	Per Cent. not Com- pleting Grammar School Course.	Per Cent. Leaving School upon at- taining 13th Year.	Number of Grades Below High School.	Grades in which Reduction is Most Marked.
Coventry, . . .	District No. 1,	66.00	10.00	3	3
Rockville, . . .	.....	70.00	65.00	....	....

AVERAGE AGE OF GRAMMAR SCHOOL GRADUATES.

The replies as to the average age of completing the grammar school course may be thus summarized :

AVERAGE AGE AT COMPLETION OF HIGHEST GRAMMAR GRADE.	NUMBER OF SCHOOLS REPORTING.				
	1890.	1891.	1892.	1893.	1894.
Over 12 and under 13 years, . .	....	....	1	....	1
Over 13 and under 14 years, . .	6	9	6	10	15
Over 14 and under 15 years, . .	9	11	23	26	29
Over 15 years,	11	16	17	22	29

A study of the summary shows that of the twenty-six schools reporting for 1890 only six report the average age of graduation to be less than fourteen years. For 1891 thirty-six schools reported, and in twenty-seven of them the average age was more than fourteen. It was also over fourteen in forty of the forty-seven schools reporting for 1892, in forty-eight of the fifty-eight reporting for 1893 and in fifty-eight of the seventy-four reporting for 1894. It is quite evident from this showing that the vast majority of children do not acquire a common school education at the age when the present law permits them to leave school and to seek employment. Added evidence of this is given in the percentage (in the original tables) of pupils who do not complete the grammar school course. In the majority of the schools reporting on that query the per cent. is over fifty, rising in some schools, particularly those in manufacturing communities, to sixty, seventy, eighty, ninety and even one hundred per cent. Phrased in another form, it means that in more than half of the schools reporting less than half of the children remain to acquire a common school education. As is shown in the adjoining column of percentages, very many of them leave school for the factory as soon as the law permits. In twenty-one of fifty-seven schools giving percentages on this query more than one-half of the children cease school attendance upon attaining the legal age of employment.

It is unfortunately true, as shown by the tables, that many children would not complete the grammar school course if the age limit of employment were fourteen instead of thirteen. But with that change the number who would finish the course would be largely

increased, while those who would not graduate would have the added advantage of at least nine more months in school. The resultant gain would appear in the future manhood and womanhood of the commonwealth.

WHAT SOME OF THE TEACHERS SAY.

Interest in the subject induced many of the school principals to send, unsolicited, comments, the more pertinent of which are here inserted :

KILLINGLY.—“ About one-half of the pupils leave as soon as the law allows.”

HARTFORD.—“ Am deeply interested in the problem you are trying to solve. I believe our compulsory laws are totally inadequate. I hope the limit will be raised one year. The interests of the State demand it.”

DERBY.—“ Personally, I should be glad to see the limit raised to fourteen years. I think if it could be carried out it would be much better to permit no one to leave school until he was fourteen, for this reason: too often children come just to comply with the law, and as soon as sixty, or one hundred and twenty, days have expired ask for a certificate. The cases, in my estimation, are few where it is really necessary for them to work earlier.”

NORWICH.—“ My school is made up principally of children of foreign parentage, who will, if possible, evade the law. Within three years many Russians have come into this vicinity. The children know scarcely a word of English; consequently, a child, who is twelve years old when he comes to the United States, has a very limited education when he leaves school at fourteen years to enter a factory, for a part of the first year has been spent in acquiring English, and all his recitations have necessarily been with primary children.”

EAST LYME.—“ It seems to me it is at least nothing more than is needed in our rising generation to raise the age limit of employment. I find that in this school there are comparatively few who really complete their studies of the grammar department. There seems to be a lack of interest among both pupils and parents in having studies brought to any sort of completion.”

NEW HAVEN.—“ Here is a fact that shows about how much many of the boys who leave school as soon as the law allows have attained. Such a boy is assisting his mother in keeping a little store in a nice neighborhood. The other day the boy printed a sign and displayed it in the window, ‘Homade Pies.’”

NEW BRITAIN.—“ Owing to hard times, fewer have found employment this year, though I am sure the percentage of those dropping out in former years must have been greater.”

GREENWICH.—“ Twelve to fifteen is worth more to the pupil than all before: hence, make the time fifteen.”

HUNTINGTON.—“I favor fourteen as the age limit, as the year is one of mental growth.”

WILLIMANTIC.—“I urge raising age from the present limit at least one year.”

PLYMOUTH.—“After thirteen years of age quite a number attend school only enough to comply with the law. Think it would be desirable to place limit at fourteen years instead of thirteen.”

DURHAM.—“I am in sympathy with the movement to add a year to enforced attendance at school.”

ROCKVILLE.—“Why not strike at the root of the evil and require every pupil of sound mind to finish the grammar school course before he can be lawfully employed?”

NEW BRITAIN.—“I am glad of the opportunity to add my word for the additional year for moral, mental and physical development. Taking into consideration the small percentage that reaches the high school, is it not wise legislation that provides that these children may know more of the duties of citizenship than is possible under present conditions at the age of thirteen?”

RESTRICTIONS IN OTHER NEW ENGLAND STATES.

Some other of the New England States require, by their statute regulations, more school attendance on the part of the child-worker than does Connecticut. Maine permits children to work in factories or stores after their twelfth birthday, but requires sixteen weeks of school attendance annually up to the fifteenth year. The absolute prohibition in New Hampshire is the same as in Maine, but children between twelve and fourteen years of age must attend school six months annually, and even those under sixteen are barred from regular employment unless they can read and write or have attended school twelve weeks during the preceding year. Vermont has the low age limit of ten years, but children under fourteen years who cannot read or write must attend school twenty weeks annually. In Massachusetts, as in Connecticut, none under thirteen may be employed; and none under fourteen unless they are able to read and write and have attended school twenty weeks in the preceding year, or are regular attendants at a public evening school. Rhode Island prohibits the employment of children under fifteen years of age unless they have attended school twelve weeks during the preceding year, or can procure a certificate that they have acquired the elementary branches taught in the public schools.

It will be noted that in four of the New England States ability to read and write is a condition precedent to beginning life's work.

This is in close sympathy with our system of government which presupposes intelligence on the part of its citizens. Connecticut recognizes that important fact in its denial of the suffrage to those who cannot read. Illiteracy without the ballot is less dangerous than illiteracy with the ballot, but even restricted illiteracy is a menace to the body politic. Among 5,124 children between the ages of fourteen and sixteen employed in a small proportion of the manufacturing and mercantile establishments of this State, the agents of the State Board of Education found 102 who could not read or write.

IN STATES OUTSIDE OF NEW ENGLAND.

In many of the States outside of New England, the motive underlying the child-labor laws is physical rather than intellectual. Where the education of the child is the paramount consideration, the laws are often more radical than are those of Connecticut. New York and Colorado prohibit employment in factories of children under fourteen years of age, but in neither State has the law been extended to mercantile establishments. There is a further provision in the New York law that "no child under the age of sixteen years shall be employed in any manufacturing establishment who cannot read or write simple sentences in the English language, except during the vacation of the public schools in the city or town where such minor lives."

In New Jersey the age limit of employment is twelve for boys and fourteen for girls, with a further prohibition of all under fifteen who have not had twelve weeks' schooling in the preceding year. The age limit is twelve in Kansas, but children under sixteen cannot be employed unless they can read and write and show a teacher's certificate of school attendance for at least three months in the previous year. No child under fourteen may be employed more than seven months in a year in Wisconsin, nor more than eight months in a year in Michigan. The law recently enacted in Illinois absolutely prohibits the employment of any child under fourteen years of age. In Missouri no boy under fourteen may be employed in a mine unless he can read and write, and in the Dakotas no child under fourteen may be employed during school hours unless having a certificate of twelve weeks' school attendance during the year.

EFFECT OF MORE STRINGENT LEGISLATION.

As to the effectiveness of the more stringent child-labor legislation in some of the New England States, reference may be made to the report of this Bureau for 1893, wherein this quoted conclusion followed from a study of the census figures in the textile industries:

"Massachusetts has a more effective law than that of Connecticut, and the per cent. of children employed in the cotton industry is less in Massachusetts than it is in Connecticut. Maine and New Hampshire have even better laws, and the per cent. of children employed in cotton mills in those States is correspondingly low. The best law and the lowest per cent. are coincident in New Hampshire. Rhode Island, where the law is weaker than in any other of the New England States, is credited with the largest proportion of children in cotton mills."

Additional reports from the Census Bureau, issued since the publication of the report of this Bureau for 1893, permit of a comparison of the number of children employed in all industries. "Children" in the census compilation are boys under sixteen years of age and girls under fifteen years. New York, where the age limit is fourteen years, is included in the comparison. The Illinois law has been enacted since the taking of the census.

CHILDREN IN ALL INDUSTRIES.

	NUMBER OF CHILDREN EMPLOYED.		Per Cent. Decrease Children 1880 to 1890.	PER CENT. CHILDREN OF TOTAL NO. OF EMPLOYES.	
	1880.	1890.		1880.	1890.
The United States. . . .	181,921	121,194	33.38	6.66	2.57
New England,	41,306	22,287	46.04	6.38	2.52
Maine,	3,746	2,442	34.81	7.07	3.22
New Hampshire, . . .	3,291	1,669	49.29	6.74	2.64
Vermont,	831	389	53.19	4.74	1.56
Massachusetts,	17,445	8,877	49.11	4.95	1.83
Rhode Island,	7,548	5,825	22.83	12.00	6.77
Connecticut,	8,445	3,085	63.47	7.48	2.06
New York,	29,529	12,413	57.96	5.56	1.46

In all of the States named, and in the United States at large, there was during the decade an absolute and gratifying decrease in

the number of children employed in manufacturing, the highest per cent. of decrease being reported for Connecticut. There is much encouragement in this showing for those who have worked to lessen the evils of child-labor. It is evidence of the effectiveness of legislation thus far enacted. The most instructive comparison, however, as to the result of child-labor legislation, is invited by that portion of the table giving the per cent. of the number of children employed of the total number employed at the different periods. It will be observed that the per cent. of children to the total in Connecticut in 1890, was less than in three other of the New England States, though little relative importance is to be attached to the rate in Vermont, in which State the total number of people employed is comparatively small, and in which State, also, the number of textile establishments is comparatively few. The contrast can more properly be drawn between the per cent. in Connecticut, and the per cent. in Massachusetts and in New York. Child-labor and educational laws are more radical in Massachusetts than are like laws in Connecticut, and the difference in percentages, in favor of Massachusetts, may be ascribed to such laws, as the very marked reduction in the percentages in Connecticut, between 1880 and 1890, may be very largely ascribed to similar laws, supported by the public sentiment which created them.

BENEFICIAL RESULTS IN NEW YORK.

New York's exceptionally low percentage of children in manufacturing establishments shows the effectiveness of her superior child-labor laws. Put in concrete figures, there are employed in New York factories fifteen children for each thousand of employes, in Massachusetts eighteen per thousand and in Connecticut twenty-one per thousand. Though there has been much improvement in Connecticut, there is occasion for a further advance, to keep abreast with the movement of economic reform.

The factory inspectors in New York are charged with the enforcement of the child-labor laws, and the statements of these inspectors as to the observance of the laws and their beneficial effect may be cited as good evidence in this connection. In their report for 1892 they say that the law is generally observed; there not appearing "to be any desire on the part of employers to violate it." The report continues :

"The idea that child labor is cheap labor prevails no longer in this State. Experience has taught those who at one time believed

in utilizing the labor of small children in order to reduce the cost of production that the waste, trouble and destruction they caused far more than offset the difference in wages which must be paid to older hands. While children under sixteen and over fourteen years of age may be employed in manufactories, many employers now refuse to employ any under sixteen, because of the annoyance to which they are put to procure certificates of the ages and to keep registers of those between fourteen and sixteen years of age, or else in furtherance of a policy to get along without any child labor whatsoever. In nearly every instance where a child under fourteen years of age is found in a factory or workshop the fault rests with the foreman, who may be imposed upon, or with the parent, who, in order to obtain the pittance which the child is paid, has sworn falsely to its age.

"The requirement that children under sixteen years of age who are employed in factories must be able to read and write simple sentences in the English language, has been very effective in forcing into our schools the children of non-English-speaking immigrants, who were formerly compelled to seek employment in factories immediately after landing. It has also checked the policy, once prevalent among the people of some nationalities, of sending their children to the schools where only a foreign tongue was taught, with the expectation that the English language would be 'picked up' from their associates. A very decided improvement in the general education of children is observed, as compared with our observations of some six years ago, when the law regarding child-labor first went into effect. It was then no uncommon thing for the inspectors to meet children at work who were absolutely illiterate, many of them having been born of English-speaking parents in this country. Such cases are extremely rare now. However, we do often meet those, grown up now, whom we then turned out of factories because of their illiteracy, and who voluntarily come forward while the inspectors are in the workshops and thank them for compelling them to leave work and go to school, thus having enabled them to obtain the rudiments of an education. Such instances fully vindicate the wisdom of the child-labor law of this State."

The inspectors report a reduction of sixty-five per cent in child labor in the factories and workshops of New York between 1886 and 1892. This corresponds closely with the per cent. of reduction between 1880 and 1890, as shown by the census figures.

CHILD-LABOR LEGISLATION ABROAD.

In many foreign countries child-labor legislation is in advance of like legislation in this country. The motive, of course, in nations annually drawing thousands into their standing armies is largely physical development, though intellectual progress is prominent, also, as a motive in the legislation of England, of Germany, of Switzerland, of Sweden and of Denmark. In Switzerland and Austria the age limit of employment is fourteen. England prohibits the employment of children under ten years of age, and limits it for children under fourteen to half time, also requiring half-time school attendance. Denmark has a somewhat similar law, and Sweden limits the employment of children under fourteen years to six hours daily. In Germany labor in factories is prohibited to children under twelve, and to children under fourteen is limited to six hours daily, with a requirement of three hours school attendance daily.

Child-labor legislation in Austria followed startling evidence of the deterioration of the race through women and child-labor. Whereas in 1870 thirty per cent. of those who had reached the age of conscription were found to be fit for military service, in 1878 only eighteen per cent proved to be fit. With an increase of 205,546 men to draw from, 23,216 fewer recruits were obtained. This deterioration of the physical standard was more pronounced in the manufacturing districts than in the agricultural provinces. Alarmed by such evidence, Austria passed laws regulating the factory employment of women and children.

STRENGTH OF BODY AND OF CHARACTER.

Other striking examples of the deteriorating effect of child-labor on the physique of a nation or of a class might be cited. But it is not considered necessary. It is too patent a result to need strengthening by argument. Fortunately, we do not anticipate in our country a demonstration like that cited in Austria. But physical stamina is no more of a secondary consideration in the arts of peace than in the art of war. Strength of body is second only to strength of character in the make-up of the citizens of a democracy. Both are weakened by child labor. The child, compelled or permitted to toil in an enervating atmosphere at an immature age, often loses the opportunity of healthy physical growth, loses the opportunity and sacrifices the right to an education, and often loses

character and the proper moral impulse, by reason of an environment, at an impressionable age, of improper surroundings. These children, growing up in ignorance, often to serve the purposes of gain, are not able, when they arrive at manhood's estate, to bear their share of physical or of civic burdens. They are poor citizens, the tools of demagogues and of plotters. They are liable to become enemies to a government whose purpose they do not understand and whose laws they regard as merely restrictions upon license. Worse than this, as like begets like, they become the progenitors of children who, from inheritance of evil and the lack of proper parental direction, go from bad to worse. Crime is linked with ignorance and poverty with both.

GREATER SKILL AND INCREASED COMFORTS.

In an address on "Organization of Educational Forces" (having reference more particularly to schools other than elementary, but nevertheless bearing on this subject), William S. Schofield says:

"If the statement made by General Eaton, that commerce, industry, legislation and administration would go back to barbarism if the care of the young were neglected for a single generation, be accepted as measuring the influence of the school system upon civilization, have we not a right to expect that, with a universal educational system, well established, they would go forward to a most dazzling civilization? Our common—our whole—people would have more innocent play and rest, and more refined joy and pleasure mixed with the strain and struggle of toiling life. They would have greater skill in labor and more profit from it, and they would be enabled to acquire and to enjoy increased comforts and culture."

If neglect for a generation would involve so great a retrograde, an added year of schooling and training would mean a proportionate gain for the individual and the State—would mean greater skill in labor and more profit from it, with increased comforts and culture. That last is the main consideration from the purely economic standpoint. The argument on this phase of the subject can be well stated in the quotation which follows from a paper on "Child-Labor" by William F. Willoughby, published in No. 2 of Vol. V. of the publications of the American Economic Association:

EFFECT ON THE STANDARD OF COMFORT.

"The employment or non-employment of children has a bearing of great importance upon many economic questions. From this side of the question comes almost as much interest as from the humanitarian standpoint. It enters as a factor into many of the most wide-reaching and important topics, which determine the welfare of the working classes. The wages question, competition of labor, the profits of the manufacturers, and above all the standard of comfort of the laboring classes are all largely affected by the employment of children. Its effects on such questions as these furnish the strongest argument for the prohibition of child employment.

"To understand clearly how and why the employment of children must necessarily have an injurious effect upon these important questions, of so much consideration to the working class, and to all society, it is necessary to thoroughly understand the true nature and significance of what economists term the 'standard of comfort.' It is the rule of the standard of comfort, which is the cardinal test, by the light of which all reforms should be judged and interpreted. Any attempt to better the condition of the laboring classes, which does not ultimately raise their standard of comfort, will be useless, and any cause, which tends to lower it, should, if possible, be removed. If the abolition of child-labor will not tend to raise the standard of comfort, of the working classes, it will be of no avail as a means for bettering their condition. * * * * *

"By constant repetition and force of habit the laboring classes have become accustomed to a certain standard or grade of living, which is not in every case, that which will barely support life. Thus the minimum of wages that an American laborer will accept is far above that of the Chinaman, though, possibly, he could live on that of the latter. 'Before he will forego those things, which, by habit, have become necessities to him, he will refuse to work, will inaugurate strikes, riots, and other means, which will endanger the peace and prosperity of the community.' It is for this reason that the degraded and worst-paid laborers are not the ones who commence strikes and lock-outs, but the more intelligent and higher-paid workers, who have become accustomed to a standard of comfort above that of mere existence, and without which they will not work. It is here, then, that political economists differ from Marx and his followers. This law is true only as a tendency. Though the tendency of wages is to a minimum, this minimum is not the bare sustenance of life, but the standard of comfort of each class and nation. This standard is what each nation and class makes for itself. It is evident that the welfare of the masses is directly dependent upon the standard of comfort, and that it marks their real condition, as above this they cannot, as a rule, go, restrained as they are by the tendency laid down in Ricardo's Law of Wages. To benefit the laboring classes their standard of comfort must be raised.

"It is in this light that child-labor has its greatest interest and importance, and by it alone can be finally determined the real effect of their employment on economic progress. If its influence is to lower the standard of comfort, its harm is incalculable; if its abolition will raise it, it will be a true reform and progress. Let us see what the effect of the employment of children is.

"The standard of comfort for a class of people is the result of a slow growth, arising from years of habits and surroundings. Children, when employed in factories, are taken at the earliest possible age, and subjected to very degrading conditions. They are often treated as mere brutes or slaves; and, never accustomed to anything but the very lowest conditions of living, comfort, or morality, acquire the lowest standard of comfort. This standard they carry throughout life. It is this class of laborers, who, as they grow up, are willing to work at starvation wages, or just what will barely support them in the condition to which they have been accustomed. Thus they tend to force all labor to their condition. This labor is the worst of pauper labor, and to them the standard of comfort coincides with the minimum of Marx, and his law of wages is an iron law, indeed. If, instead of their factory life, these millions of children had been compelled to attend school, and had acquired some education, and experience of things better than they have had in their factories, can anyone suppose that they would work for what they now do, or submit to the conditions, under which they now live and labor? Their standard of comfort would be much higher, and the lowest class of cheap labor would be removed from our midst. It is the few who are willing to work at low wages that drag the others down to their level. The prohibition of child-labor could not operate otherwise than to raise the standard of comfort for a large number of our citizens, thus having a beneficial effect throughout all society. England's supremacy to-day rests largely upon her wise labor laws.

"Let us next consider the effect of child-labor upon wages, and, more particularly, its influence on the gross earnings of the family. We have seen that in the theory of the standard of comfort, is really contained the true law of wages. In the long run, the wage of a class is just what the standard of comfort fixes. Prof. R. T. Ely, in his 'Introduction to Political Economy,' says: 'It has been the opinion of many of the ablest political economists, for over a century, that what is technically called the standard of comfort determines the wages of labor. There is so overwhelming an array of facts, gathered from widely separated countries, and from periods so distant from one another, which confirms this conclusion, that it is difficult to resist it.' Thus, that which lowers the standard of comfort, lowers wages; that child-labor lowers wages there can be little doubt; it is, essentially, cheap labor. With improved machinery, it enters as a competitor for work in the same employments, and in the same places and shops with adult laborers. Its wages, are in almost all cases, less than those of adults. Not only does it

tend to reduce the wages of adults, but, to a large extent, deprives them of employment. A number of States have made careful collections of statistics of those out of employment, and from these it is found that a much larger per cent. of adults than of children are unemployed. While the children are retained at their lower wages, their fathers are forced into idleness. The employment of children is assigned by these reports as one of the chief causes for the idleness of working men and women. If child-labor could be abolished to-day, there are probably enough adults, out of employment and willing to work, to fill their places.

"With the introduction of newer and improved machinery the sphere of the employment of children is constantly widening, and the number of them employed increasing. The inspectors of factories in our States constantly report instances where the wife and children work to support the family, while the father, unable to obtain work, remains idle, or performs the menial work at home. This reversal of the order of nature is one of the evils of the factory system. The children become old before their time, and independent of parental control; while the fathers, becoming accustomed to living on wages of others, rapidly become pauperized, as under the old poor laws of England. As the children grow up, they, in turn, follow the fate of their fathers. The Associated Charities, in the last few years of their vigorous history, have been in a position to, and have investigated carefully the causes of idleness and pauperism; and it is the expressed opinion of those at the head of this work, that child-labor, as much as any other single cause, is responsible for this poverty, by its early breaking down the health of the laborers, and the throwing out of employment of the adults. The age at which the greatest amount of labor should be performed is thus unnaturally placed in weak youth, instead of strong middle age. What more uneconomical system of labor could be devised?

"More important to the laborers themselves than their individual earnings, is the effect of child-labor on the gross earnings of the family. The wages of the family is the true gauge of the condition of its members. It is of the utmost importance to clearly understand the exact relation which the employment of children bears to the family income, for it is this point which has prevented a more hearty co-operation of the laborers themselves for its abolition. Though generally admitting that their wages may be lowered somewhat by their children's employment, they have held that they were more than compensated by the earnings of the child. This is a fallacy. The admitted law is, as we have seen at the beginning of this chapter, that the whole family would, on the average, be kept by the wages of its head at the standard of its class, handing on the same lot to an equal number of offspring. But when women and children are brought in with their labor force, to compete against the labor of the men, the whole family together earns on an average, no more than the father would earn, if they were not allowed to enter the field against him. 'These men cannot work for less than

that which will furnish them and their family a living, if he alone were allowed to work; but, if his children also can work, in their desperate struggle for existence, they will work for just as much less as their children can earn, as, on the gross earnings, the family can now live at the standard to which they have been accustomed.'

"Prof. Richard T. Ely, in his 'Introduction to Political Economy,' says:

" 'Among the striking evidences of the truth of the standard of life as the norm for wages, the fact is especially noteworthy that, as a rule, it seems to fail to benefit the laboring population on the whole, and for any length of time, for the wife and children to earn money, even apart from all other considerations than mere money getting. The world over, when it becomes customary for the wife, or wife and children, to work in factories, it very soon becomes necessary for them to do so to support the family. The wages of the head of the family and the earnings of the entire family, as before, just maintain the standard of comfort among that class of the population. Prof. E. W. Bemis has called attention to the fact that in the textile industries of Rhode Island and Connecticut, where the women and children work, the earnings of the entire family are no larger than in other industries, like those of metal, in Western Connecticut, where only the men work.' "

NOTHING GAINED BY CHILD LABOR.

Confirmation of the statement that, when women and children go into the mill to work, the family together earns no more on the average than the father alone would earn if not subjected to such degrading competition, is found in this table, prepared by George Gunton from data furnished by the sixth annual report of the Massachusetts Bureau of Labor:

TRADES.	Father's Yearly Wages.	No. in Family.	Total Earnings of Wife and Children.	Total Earnings of Family.	Total Cost of Living.	No. of Women and Children Working.
Shop, . . .	\$752.36	4¾	\$69.04	\$821.40	\$772.21	¼
Metal-workers, .	739.30	4½	90.51	829.81	723.00	½
Building, . . .	721.32	4½	73.00	794.32	740.03	½
Teamsters, . .	630.02	5½	105.00	735.02	729.00	½
Shoe and boot, .	540.00	4¾	209.00	749.00	693.13	1
Metal-work laborers,	458.09	5½	256.08	714.17	697.92	1½
Mill operatives, .	572.10	5	250.35	822.45	755.04	1
Mill laborers, . .	386.04	6¾	284.08	670.12	638.99	1½
Shop laborers, .	433.06	5 9-10	232.02	665.08	642.08	1 1-10
Out-door laborers,	424.12	6½	257.93	682.05	650.81	1½

It is apparent that the workingman gains nothing in the end by bringing his children's labor into competition with his own. Much is lost. The child fails to gain part of the education to which he is entitled; loses a portion of the training and of the untrammelled physical growth which would have made him a more able competitor in the struggle of life; and, with only a knowledge of his deficiencies, takes his place of discontent in the ranks of the unskilled workers. What is his loss is the State's loss also. It is the right and the duty of the State to prevent this economic waste, as the State can alone act effectively in the amelioration of a whole class of labor.

WOULD NOT INTENSIFY COMPETITION.

To the manufacturers themselves the raising of the age limit of employment would, in the end, prove to be an advantage. Many of them recognize this, and declare their belief in the uneconomical character of child-labor. Others of them employ children because, as they say, they could not compete with their neighbors, if they did not, or because the short-sighted parents make the employment of their children conditional upon their accepting situations for themselves. The argument that any increase of the restrictions in the employment of children would increase the difficulties of competition is fallacious. Just the same argument was advanced in a vain attempt to prevent legislation limiting the daily hours of employment. Such legislation did not lessen the ability of those affected by it to compete with others. On the contrary, it increased the efficiency of their employes, and gave them an advantage. Increased efficiency on the part of workers, to the attainment of which the diminution of child-labor would be most effectual, involves higher-earning capacity. This, in turn, is followed by a higher standard of comfort and a greater purchasing power. The consequent increased consumption and demand more than compensates the manufacturers for the deprivation of cheap child-labor. This is the broad view of the subject. Looking at it more narrowly, it may be said, with truth, that children over fourteen years of age cost little more, if any, in wages, than children under that age. During the thirteenth year they may be employed, under the present law, only nine months. The pittance they could save to a manufacturer in labor cost in that time, or the pittance they could earn for themselves or their parents, is not to be considered in comparison with the great and manifest advantages, to themselves and to society, of keeping

them in school for that added length of time. For many of them the three months in school are practically wasted, as they are sent to school, as one child phrases it, merely "to work for a certificate." Their thoughts are not on their books, but how to evade school duties until the expiration of the required twelve weeks. As has been well said, they forget in the 300 days following what they learned in the sixty.

OTHER OBJECTIONS ANSWERED.

The other objections to further limitations on child-labor are that it would work hardship to invalid parents, that it is socialistic and an interference with the rights of the parent and of the child, and that it would foster idleness. These same arguments might be advanced against any limitation on child-labor—have been so advanced, in fact, and have been overruled. Possible hardship to a few is not to be set off against positive advantage to all. No reform can proceed without temporary discomfort to some. But that is not a good reason why abuses should not be remedied. It is better for the State to bear a small burden of relief now than a larger burden later. As to the argument based on the interference with rights, it is too late to advance the plea of *laissez faire*. Industrial legislation has gone far beyond that doctrine, the abandonment of which, indeed, marked the beginning of the amelioration of the condition of the working classes. The State's solicitude for children, far from being an interference with rights, is a championship of the rights of the children by the only power capable of extending protection.

The State says now that children under thirteen years of age shall not be employed in factories or stores, and that children under fourteen years of age shall attend school twelve weeks during the year. It is only a short step forward to legislate that they shall not work in factories or stores until they have passed their fourteenth birthday. With a proper amendment of the educational laws, the change in the age limit of employment would not foster idleness. It is the testimony of the State Board of Education that raising the age limit to thirteen years did not increase the number of vagrant children, and that little difficulty is experienced in enforcing the present statute. The same agencies could as readily enforce the law, if the limit should be made fourteen instead of thirteen. Indeed, it is possible that, with such a change in the law, infractions of it would be fewer. The really effective enactment is that which unquali-

fiedly prohibits the employment of children under a certain age. The requirement of a certain amount of school attendance as a condition of legal employment can be more easily evaded.

SUPPORTED BY PUBLIC SENTIMENT.

The proposed change in the laws is supported by public sentiment. No reason has been found to modify the opinion expressed in the report of this Bureau for 1893, the result of an extended inquiry, that public sentiment in Connecticut heartily favors the suggested modification. A like healthy sentiment is found to prevail everywhere. In all the reports of the thirty States having labor bureaux, and in the reports of the twelve or more States having inspectors of factories, not one is found to do other than commend the total restriction of the labor of children under fourteen years of age. At the eighth annual convention of the International Association of Factory Inspectors, held in Philadelphia in September in 1894, a resolution was adopted recommending that all children under fourteen years of age should be prohibited from being employed in any manufacturing or industrial establishment whatever.

EFFECT OF REDUCED WORKING- TIME ON PRODUCTION

Renewed prominence was given during the year to the movement for a shorter work-day by publication of the results of trials accorded the short day by prominent manufacturers of England, and by the introduction of the eight-hour day into English government work-shops. The extension of the system in the government shops followed the trial of the system by private employers, and was largely due to the results of the private tests.

The most important of those tests was made at the Salford iron works (Mather & Platt, Ltd.), Manchester, where a year's trial was made of the forty-eight hours week. The trial was made by the firm at its own risk, and unsolicited by employes or the trade unions, and the experiment was undertaken—in the words of Mr. Mather, M. P., “to prove how far the wide-spread desire for shorter hours might be met without danger to the mechanical trades, or whether it must be resisted in the interests of all concerned.”

CONDITIONS OF THE TEST AT MANCHESTER.

The reduction in working time was from fifty-three to forty-eight hours per week, with no reduction in the wages paid, and under conditions, Mr. Mather says, that “render the conclusions arrived at trustworthy on the part of all, whether employers or employed, who are engaged in the engineering and machine-making trades.” The conditions were such as actually exist in the great majority of manufacturing concerns in the United Kingdom, and the trial was made at an establishment of such capacity as would

exclude the possibility of specially-selected men being employed. The full complement of men at the Salford iron works is 1,200, and the trades represented at the works are pattern makers, moulders (iron and brass), smiths, coppersmiths, and tin-plate workers, engine fitters, millwrights, electrical mechanics, turners and fitters, brass finishers, boiler makers, planers, drillers, borers, machine-tool men, joiners, and laborers.

The character of the work turned out during the year of trial was similar to that of the preceding six years, viz., general engineering work, in which are comprised steam engines, pumping machinery, boiler work, etc.; all machinery used in the textile trades (other than spinning and weaving) for the bleaching, printing, and finishing of cotton, linen, silk and other fabrics; electrical machinery of every variety for lighting, transmission of power, electric traction, electro-depositing, electro-chemical processes, etc.

The year's trial was made during a period of general trade depression; but fortunately for the purpose in view, though the prices obtained for the output of the concern were lower in the aggregate than were ever reached before, the total invoice value of the orders executed during the year amounted to the average value of the six preceding years. This was an unfavorable state of things for the success of the new system; because with five hours less of work per week without a reduction of wages, and with the prices for machinery lower than in any preceding year, it was to be expected that the ratio of labor cost to selling price would be abnormally high.

All the productions of the works are subject to the keenest competition both in the home and in foreign markets. No monopolies of any kind were included in the year's trial, and the royalties included in the prices of special inventions were deducted in all cases, and only the prices of the machine itself were taken for the purpose of the comparison. Every element which might render the experiment doubtful as to its general application as a test for the whole engineering and machine-making trade was eliminated.

About one-third of the men employed are on piece-work wages, and the piece-work system received a thorough representation in the trial, as well as the fixed weekly-wage system. No overtime whatever was worked, except for break-downs and repairs. Extra men were employed on the double-shift plan to meet extra pressure of work.

The only preparation made to give the trial "a fair field and no

favor," was an earnest appeal to the foremen in the various departments to exercise forethought and vigilance steadily through the year in forwarding the work from process to process, to furnish materials well in advance, and to provide such simple facilities and workshop conveniences (not new tools) as might be suggested by the men, especially the piece-work men, from time to time. Such facilities, however, did not amount to an appreciable sum, though they may have been very helpful to the men. The method adopted to insure accuracy in the trial is thus explained in Mr. Mather's words:

"In order to carry out the trial with scientific precision and care, a very competent engineers' accountant—a member of the staff at the works, who was perfectly familiar with the subject, having occupied the position for some years—was deputed to take daily and weekly notes of the smallest detail of time and cost throughout the year. His method of keeping the books relating to cost and production, and the statistical knowledge he possesses, gathered from a large experience of all questions involved in the various processes of our manufactures, render the results which are recorded in the following Report absolutely correct and trustworthy."

The inauguration of the year's trial was arranged with the chief officials of the Amalgamated Society of Engineers, the great trade union of the engineering and machine-making trades of the United Kingdom. It was agreed that during the year's trial at the Salford works there should be no impulsive and premature action on the part of any branch of the Amalgamated Society towards obtaining the eight hours day; and that Mather & Platt should be at liberty to revert to the previous system of working hours, should the experiment prove to be a failure, or to propose modification or alteration of the system of forty-eight hours without any reflection on the good faith of the firm.

NOT A PHILANTHROPIC IDEA.

The first announcement of the desire of the firm in the matter was made to the employes, who were called together in mass meeting. They were asked by Mr. Mather whether they could not, in connection with the firm, "devise some plan by which the hours of labor may be shortened, so as to be a benefit to you, and not disadvantageous to the business in which we are all engaged. You form a partnership with the members of this firm in carrying on a large industry, and the success of that industry is as much your concern as ours. We should, therefore, endeavor not to allow it to fall

away by any mistaken policy or action, either on your part or on ours. Of course, our competitors alone would benefit in that case ; you would suffer, and we should suffer."

The first quarter of the day, Mr. Mather said, was unprofitable to employers and not very enjoyable to work-people. The latter, though perhaps retiring late on account of the evening's recreation, rose early and went to work before breakfast. It would be better, Mr. Mather thought, if there need be only one meal hour in the working time of the day, and if workmen could start their work after enjoying a good solid meal with their families before leaving home. Mr. Mather disclaimed any ideas of philanthropy in the proposition, adding :

"I should only be a mischief-maker if I disregarded the interests of other employers and proposed to you what could not be accepted by the employers in the trade as a whole in the course of time. I may tell you that the difference between the wages at fifty-three hours per week and forty-eight hours, if the payment remained the same, would be some thousands of pounds per annum. I have not in my mind any idea of reducing wages. I should not like to contemplate men working in this establishment less hours than they work now and have to sacrifice wages. I don't think that is going in the right direction. What I want is that your wages may be maintained, your hours shortened and all of us kept prosperous."

GREATER PUNCTUALITY AND INCREASED ENERGY ASKED.

A committee appointed by the employes took no action on the subject, though they frequently discussed it with a willingness to give the new system a fair and honest trial, in the belief that the improved method of working would produce satisfactory financial results to the firm, and be of physical, social and moral benefit to themselves. Having perfected arrangements with the Amalgamated Society, the firm announced that the experiment of the forty-eight hours week, with no reduction in wages, would commence on February 20, 1893. From a circular on the subject, addressed to the employes, these extracts are taken :

Without some compensation being made on the part of the workmen, by greater punctuality and increased energy and interest during the shorter hours, it is obviously impossible that the whole trade can unite in carrying out the new system. We have been assured by many serious workmen that this is possible. If not, other forms of compensation may be suggested after the experiment has been tried over a sufficiently long period.

We rely for the success of this shortening of the hours upon the moral, as much as the physical, effect which will result therefrom.

You must be prepared to follow the strictest rules as to starting punctually in the morning and after the dinner hour. We do not wish to exact your labor, but we do consider that with these shorter hours and wages unreduced you will have it in your power to manifest throughout the day a spirit of earnestness and intelligence in your work which the longer hours may have somewhat impaired.

We cannot enter now upon the question of overtime or double shifts. These two points we propose to leave over to settle themselves after the experiment has been tried. We shall endeavor during that period to work as little overtime as possible, but the rates will remain the same as now in operation. Should we require to employ a number of men on a double shift they will be paid the same wages and work the same number of hours as heretofore.

We accept in good faith the assurances made to us that your object is to afford more employment to your fellow workmen, and consequently are willing to limit yourselves to forty-eight hours per week, in order that the demand for more labor may be supplied by other workmen, if longer hours are needed, and thus increase the possibility of employment for a larger number of men in the aggregate.

The working time table adopted was on the first five days of the week, from 7:45 A. M. to 12 M., and from 1 to 5:30 P. M., and on Saturday from 7:45 A. M. to 12 M. Though the forty-eight hours system went into effect on Monday, February 20, the period of the experiment was, for convenience, comprised in the twelve months months commencing March 1, 1893, and terminating February 28, 1894. Now follows Mr. Mather's report of the results :

WAGES COST.

The figures we have taken as the standard with which to compare results are the averages per year of the preceding six years, during the earlier portion of which the number of hours worked per week was fifty-four, and fifty-three hours per week during the later portion.

The production during the two periods has been similar in character, and the turnover in the trial year has approximated to the average of the six years so closely as to be practically the same. As regards quantity of production, there was actually a larger output in the trial year ; but owing to the prices in that year being considerably lower than in the six preceding years, the turnover did not increase with the amount of production. This fact must be borne in mind in studying the following statement as to the cost of wages.

On making up the books we found that comparing the ratio of wages to turnover in the trial year with the ratio of wages to turn-

over in the six preceding years, there was an INCREASE OF 0.4 PER CENT. in the former. But as in the trial year selling prices were considerably lower, the actual quantity produced, as represented by the equal turnover of that year, was considerably larger than in the six preceding years; therefore the ratio of the cost of wages to the turnover in that year must have been proportionately less. Had prices ruled the same, the turnover in the trial year would have been greater, and the wages cost, instead of showing an increase of 0.4 per cent., would have shown a decided decrease.

We have given no credit for this fact to the side of the trial year, but show the actual result as given on the comparison we have instituted, viz., AN INCREASE OF 0.4 PER CENT. IN THE RATIO OF THE WAGES COST TO THE TURNOVER.

This, however, does not exhaust the changes made by the reduction of the hours. We have had to discover what other advantages and disadvantages have arisen from it. The question of saving in consumables, on the one hand, and the greater load of fixed charges, on the other, have been the subject of close investigation. We have found a marked economy in gas and electric lighting, wear and tear of machinery, engines, gearing, etc., fuel and lubricants and miscellaneous stores. On the other hand, we have examined the increased fixed charges due to interest of plant and machinery, rent and taxes, permanent staff on fixed salaries being employed five hours less per week.

The balance of debtor and creditor account on these expenses is unmistakably in favor of the trial year. The credit from these items to be carried to the trial year is an amount equal to 0.4 per cent. on the net amount of the year's turnover. Thus, by a remarkable coincidence, A SAVING OF 0.4 PER CENT. is secured as a direct consequence of the shorter hours, which counterbalances the debit of 0.4 per cent. in the increased wages cost.

LOST TIME.

The improvement in respect of lost time is very marked. The proportion of "time lost without leave" to the total time worked averaged in the fifty-three hours period 2.46 per cent., whereas in the forty-eight hours period it is ONLY 0.46 PER CENT. This lost time, of course, represents a serious diminution in the year's production, and a proportionate loss on the fixed charges of the concern.

There are also other losses resulting from time lost. For instance, when a man is one of a "gang," his absence, unexpectedly, causes all his mates to lose more or less time in starting, and there is a general temporary dislocation of the work with which he is connected.

It is probably not too much to assume that this *resulting* lost time—for which an employer has to pay—is at least equal to the time lost by the man himself.

Whatever saving or benefit there may be under this head is latent. No account is taken of it in the figures worked out. There can be no doubt, however, that it has had an important effect on the general result.

PIECE-WORK.

Piece-work from the first has been a matter of considerable interest.

It was at the outset—perhaps naturally—assumed that men on piece-work were already doing their best, and if their period of work were shortened their earnings would be diminished in a corresponding degree.

This anticipation has not been realized ; for, although there is a falling-off in the percentage earned by piece-workers over and above what they would have received as day wages, it is slight in comparison with the reduction in the time, and particularly so in the later portion of the year.

In order to judge better of the working out of the system as regards piece-work, the year has been divided into three parts of approximately equal lengths.

In the first period the surplus over day-work rates was 1.76 PER CENT. LESS than the standard piece-work wages ; in the second period 1.58 PER CENT. LESS than the standard piece-work wages ; in the third period 0.78 PER CENT. LESS than the standard piece-work wages ; the average for the twelve months coming out 1.41 PER CENT. LESS than the standard.

These figures show that as the year advanced there was a steady adaptation to the altered conditions ; and it is reasonable to expect that the small difference remaining at the end of the year will soon disappear.

It must also be noted that in no single instance during the year were piece-work rates advanced. In fact some reductions were made—in a few special cases where the rates were admittedly too high. Had these few changes not been made, the difference between the two periods would have been 0.5 PER CENT. ONLY, instead of 1.41 per cent., a difference which is not at all unusual between two years, as slight fluctuations in piece-work earnings have occurred from one year to another under the old system.

The chief points of interest arising out of the comparison made between the two periods for wages-cost of work produced may be thus epitomised :

	In Favor of 48 Hours. Per Cent.	Against Per Cent.
Comparison of wages to turnover, made simply on the net value of production and the wages thereupon, . . . ..	..	0.4
Balance of account for "wear and tear," fuel, etc., as against increased cost per hour worked, for fixed charges, which must be credited to wages account,	0.4	..

	In Favor of 48 Hours. Per Cent.	Against Per Cent.
Proportion of "lost time" to total time,	2.0	..
Difference in the amount of piece-work production as shown by piece-work balances in three periods of the year—		
1st period, . . . . .	..	1.76
2d period, . . . . .	..	1.58
3d period, . . . . .	..	0.78
Difference of piece-workers' earnings after equalizing prices for fair comparison with preceding years for the whole trial year, . . . . .	..	0.5

It will be clear from these figures that the wage-cost of production in the forty-eight hours system remains the same as it was under the fifty-three hours system, when the new system is credited with the saving in consumables, wear and tear, fuel, etc., which is the direct consequence of the change without diminishing the output of the works.

The piece-workers have lost slightly on the year, but the later months show this loss to be a vanishing quantity.

A curious fact is illustrated by the piece-workers' statistics. The diminution in their total wages means a proportionately less production in actual work turned out by them. But, as the total output of the works during the trial year was greater than that of previous years, the diminution in the production of the piece-workers must have been more than compensated for by extra production on the part of the day-workers.

RECOMMENDATIONS TO OTHERS.

The statistical results given above are, as already stated, based on actual money figures recorded in our books, which we could not be expected to make public, as to do so would put us at a serious disadvantage from a business point of view.

Even after a few months of its working, I felt so assured of the mutual benefits accruing both to employers and employed from our trial, that I felt it to be a matter of public duty to apprise the heads of the government departments—the War Office, the Admiralty, and the Post Office—of the advantages that would be derived by the adoption in them of the forty-eight hours week.

The Secretary of State for War, Mr. Campbell Bannerman, the First Lord of the Admiralty, Earl Spencer, and the Postmaster General, Mr. Arnold Morley, respectively invited me to meet the chiefs of their construction departments from the Woolwich Arsenal works, the Dockyards, and the Post Office, to give the results of the trial at the Salford iron works, and to state my reasons for advising the immediate adoption of the forty-eight hours week in their departments.

These responsible chiefs of important government departments, in which many thousands of men are employed in the mechanical trades, naturally required convincing proofs that they would be justified in adopting the forty-eight hours week on economic grounds, and on those grounds alone. They approached the subject at our interview with open minds, but with serious doubts as to the possibility of accepting the advice I ventured to offer, that they should at once adopt the new system. After the conferences only a few weeks elapsed before the Woolwich authorities heartily adopted the forty-eight hours week, and since then the Dockyard authorities have announced their determination to do the same.

PERMANENTLY ADOPTED.

For the purpose of the several conferences I submitted figures of a more confidential character than I can make public in this report; but the essence of the results now made known is based on the same figures, with the additional testimony of several more months which make up the complete trial year. With such results before us, my firm could not hesitate to decide to continue the forty-eight hours week as a permanent system. * * *

Now, in looking with the light of our own experience, and far beyond our own interests, to the wider field of employment and production in the engineering and mechanical trades in the United Kingdom, my partners and I feel bound to express the hope that our fellow-employers will give our testimony the fullest consideration, with the view of making the forty-eight hours week universal throughout the great industry in which we are all engaged. * *

MUTUAL ARRANGEMENTS RATHER THAN LEGISLATION.

The cry for legislation to settle the conflict between the natural and laudable aspirations of working men and the fears and doubts of employers, is a danger to the whole field of industry.

Mutual responsibility and mutual benefits can only be secured by mutual arrangements.

A rigid law passed by members of an imperial legislature, whose votes are often given hap-hazard, or for party reasons, or for "a safe seat," can never provide a remedy for such conflicts as those which arise in the industrial world in connection with the complex questions of wages and hours of labor.

There are, of course, simple questions of protecting some work-people in dangerous employments or unhealthy occupations, which may require the state to assume the responsibility of prescribing the limit of hours per day during which adult men may be exposed to such conditions.

But the great manufacturing industries of the country as a whole, if they are to be secure and prosperous, must be conducted by arrangements mutually planned and carried out by the trade

unions and the employers, and any legislation which would promote and strengthen such arrangements would be wise and may be necessary. * * * * *

It is a notable and significant fact that a great trade union has, in the midst of the general agitation for shorter hours, calmly and patiently waited for the result of a crucial trial, the making of which it encouraged, before giving the slightest sanction to any appeal being made to employers generally.

Surely such a mode of dealing with this important question can be universally adopted in all trades. The peculiarities of each can thus be specially met, while the continuity of industrial development and success is secured. * * * * *

IT WAS NOT A YEAR'S "SPURT."

Our observations, and the careful supervision of our foremen have not detected that our workpeople have consciously made anything like "a spurt" in the trial year, hoping thereby to gain a permanent reduction of hours, with the intention of 'easing off afterwards, as some have thought would be the case.

A year is a long period to keep up "a spurt." It would, in fact, be impossible to sustain a conspiracy of endeavor so long, if any strain accompanied it.

IN HARMONY WITH A NATURAL LAW.

I attribute the full maintenance of our production through the trial year solely to the unimpaired and cheerful energy on the part of every man and boy throughout the day. We seem to have been working in harmony with a natural law, instead of against it, as in the unnatural conditions of men beginning the work of the day without the provision required by nature for the proper exercise of their mental faculties and physical powers. * * * *

The total abolition of overtime, excepting in the rarest cases, is essential to the success of the shorter hours, if my conclusions as to the cause of increased production be correct.

This custom is a delusion on the part of workpeople and employers alike.

The extra wages are obtained by the men at too great a cost. The extra work is not worth to the employers the price they pay for it.

The double-shift system, which the trade unions have readily approved, has, on the other hand, many advantages in cases of exceptional pressure.

Employment is afforded thereby to more men, and the work they do is not paid for at an abnormal rate.

It would doubtless be difficult to obtain men sufficient for a double shift in times of great prosperity; and as a permanent system of working, it is of course impossible. It will simply meet

certain emergencies. The true means for larger production is increased producing power in men and machinery.

But of this I am assured, that the most economical production is obtained by employing men only so long as they are at their best. When this stage is passed, there is no true economy in their continued work.

Appended to Mr. Mather's statement are extracts from reports of foremen of different departments of the Salford iron works. These close observers of the operation of the forty-eight hours system agree that, under it, the workmen were more punctual in beginning their tasks, and that, coming to work with powers of endurance quite equal to the reasonable day before them, they showed at their work increased energy and attentiveness. It was also observed that the moral tone of some of the employes had been greatly improved, that they were more steady and sober and more amenable to discipline, and that there had been less illness and less lost time.

ANOTHER IMPORTANT TEST.

Almost equally as important as the test at the Salford iron works has been the trial given the eight-hour system by the Sheffield Smelting Company, in which J. H. Wilson, M. P., is principal. At this establishment the trial was for two years. The result has been summed up as follows:

A careful comparison has been drawn between the result of the working of the past two years and that of the two preceding. The wages of the two years before and the two following the change have been taken and compared with the total amount of material smelted and the amount of bullion produced, and it is found that the cost in wages for both—per ton of material smelted and per ounce of bullion produced—had been slightly less under the new scheme. The effect on the work people has been notable. The men have been fresher and brighter in every respect. Instead of, as in former years, dragging out the latter portion of their time tired and weary, they have shown an increased cheerfulness and interest which has been manifested in both the quality and quantity of the work accomplished. The figures taken as the standard with which to compare results were those of the years 1890 and 1891, during which the average working hours were fifty-four and fifty-five per week, and in some departments even longer than that. The production has been similar in amount, there being, perhaps, a slight increase in the trial years. It has been found that in the latter period the men have earned practically the same wages as under the old régime. In a few isolated cases the abolition of over-time has slightly reduced the gross earnings, but in most cases

there has been no reduction except the very substantial one in the hours of labor. In comparison with the work done, no more men are employed than was formerly the case, and, curiously enough, in many instances, the same men in the shorter hours were found to do fully as much work as they formerly did. The main point is that the work people, by being fresher and untired, are able to keep up a better pace throughout the day.

Attention must be called to the serious depression of trade caused by the coal dispute, during the greater portion of which the firm was not at full work, and during a few weeks almost at a standstill. Notwithstanding this, the men were all kept at work and did not lose through the action of the firm the equivalent of one man's work for a week. Taking this fact into consideration, it is clear that but for the want of work, incident on the lockout, the men would certainly have done more for the same wages, and the slight margin of difference between the quantity done in the two would have been more obvious. Under the present system, it may be mentioned, the ordinary day men start work at 7 instead of 6:30 in the morning, as was formerly the case, leave work at 5 instead of 5:30, and stop working on Saturday at 1 o'clock instead of 1:30.

EIGHT HOURS ADOPTED BY MANY FIRMS AND MUNICIPALITIES.

The eight-hour system has therefore been permanently adopted by the Sheffield Smelting Company. It was also adopted April 1, 1894, by J. & F. Howard, of Bedford, manufacturers of agricultural tools, and employing 500 men. The reduction in time was from fifty-four to forty-eight hours weekly, with no reduction in wages. Several other English manufacturers have taken similar action. John Burns, M. P., the well-known English labor leader, says in a private letter that "about thirty private firms and many local authorities have adopted the eight-hours day. The general experience of all firms using machinery is similar to Mr. Mather's, and only in a few cases has cost of production slightly increased. The advantage to the men is very great, and they appreciate it."

It was announced in Mr. Mather's report that the eight-hour principles had been adopted in the English government dockyards and at the Woolwich arsenal. Later it was extended to all departments under the control of the Secretary of State for War. In announcing the change in the House of Commons, January 6, 1894, Campbell-Bannerman said that he and his colleagues were satisfied that "the condition and circumstances of the ordnance factories and the nature of the work done in them is such as to admit of the hours of labor being reduced to forty-eight per week, or eight hours a day, with advantage both to the public service and to the men

employed." There was no expectation, the Secretary added, that there would be necessity for any alteration or reduction in the wages of the men. This announcement of reduced working hours for 20,000 men was received with cheers in the House. Reports as to the effect of the change on production are not at hand, but that some loss was anticipated is evidenced by the announcement, made February 26, that "the War Office recoups the loss entailed through the adoption of the eight-hour system in dockyards by reducing sick-pay and overtime, and abolishing payment on bank holidays."

PROVIDING FOR SURPLUS LABOR.

Whatever the experience in the government factories, it is evident that the results, as detailed, in private establishments, do not meet the expectations of those who have advocated a shorter work-day as a means of providing for surplus labor. Practically, the production per employe was as much in the forty-eight-hour as in the fifty-four-hour week. While John Burns believes that the general adoption of the eight-hour day "would for some time find nearly all with employment who desire it," he lays more stress on the abolition of overtime and the substitution of the shift system as calculated to afford work for the needy unemployed. An exception, of course, to the results obtained in manufactories should be made in the case of people engaged in transportation and kindred service, where a reduction in the hours of labor would necessitate an increase in the number of employes.

THEORY VERSUS RESULTS.

As, in the illustrations cited, the reduction in working time did not involve a reduction in production per employe, it did not increase the labor-cost of production. This latter result is also adverse to preconceived notions, as it is adverse to the present belief of very many manufacturers. An article in the London "Iron and Coal Trades Review," penned at about the time of the parliamentary discussion on the semi-government proposal to introduce an eight-hour day for miners, entered into an elaborate calculation to show the enormous prospective money loss in earnings and in production through a reduction of the working time from nine to eight hours daily. Reference was made to the result of the tests at Manchester and Sunderland, but it was not believed that like results could be expected generally. "It would be unnatural," the

"Review" said, "to expect that, whatever might happen at individual works, the workman generally could do as much work in eight hours as in nine. At any rate, the great majority of employers, not anticipating any such result, look forward with undisguised apprehension to the growth of this movement."

EIGHT HOURS IN A TEXTILE ESTABLISHMENT.

The calculation in the "Review" embraced the textile industries, but here again, as in the metal industries, results in individual cases do not fit the theory. The Brünn Chamber of Commerce Report for 1893 gives an account of the satisfactory results obtained in a curtain weaving establishment in Moravia where the working day has been reduced from eleven to eight hours, including intervals in both cases. It appears that it was found that the amount of yarn used by those weavers whose hours it was customary to reduce to 7.2 (nominally 8) during the slack half of the year was the same as that used by them during the remaining half when their hours were 9½ (nominally 11). It was also found that their earnings during the slack season were 18.2 kreuzer (about 7 cents) an hour, as compared with 14.7 kreuzer (under 6 cents) per hour during the busy period, the quality of the work being in each case the same.

Thus a twenty-four and a half per cent. reduction of working hours was accompanied by a twenty-three and a half per cent. increase in earnings per hour. Closer observation showed that the weavers working shorter hours displayed greater industry and efficiency, and seldom left their looms or stood about talking. The hours of all weavers in the establishment were in consequence reduced to eight, including intervals, and a considerable saving in working expenses has resulted.

EXPERIENCE AND VIEWS OF AN AMERICAN EMPLOYER.

These results in other countries raise, naturally, the query, What, if anything, has been done along similar lines in our own country? It is not believed that any tests, calculated to determine the effect on production of reduced working hours, similar to the trials made in England, have been made on this side of the water. There have been in this country isolated cases of reduced working time, corresponding somewhat to the reduced hours in England, but the results as to production have been chronicled in rare instances. William W. Bates of Maine, with a labor experience of fifty-five

years as apprentice, journeyman and employer of hundreds of mechanics and laborers, adopted the ten-hour system when he became an employer. Some years afterwards he granted a strike for eight hours on condition that about the same amount of work should be turned off. His competitors in trade resisted the strike and locked up. "Ample experience," Mr. Bates says, "proved that jobs could be taken for former prices if judgment was used in giving employment only to active workers." It was his observation also that—

"The combination of nerve with muscle necessary for American mechanics and drivers of machinery cannot be obtained under the long-day system. While we may get strength, we will fail to command activity. The development of nerve and brain in workmen, with moderate strength, is more desirable in most employments than strength with dullness. Long hours and dullness belong together. Short hours, activity, brightness, ingenuity and manliness are greatly to be preferred. In short, there is no real gain to working power in men by overtasking their bodies and brains. It is not the body that works, but the body and mind. To overtask the body weakens the mind, and it was an observation of Solomon that a dull tool needs more strength. Farmers are no exception to the laws of physiology. Shorter hours and brighter minds will make the more money. Ten on the farm and eight in the shop are better than more for most men."

The economic waste of two hours of labor before breakfast, common in England, is unknown here. For this reason a reduction in working time here might be expected to have a greater effect upon production than did the reductions in England. As has been shown, however, it is unsafe to theorise on this subject. Results might again upset theories.

REDUCED TIME AND PRODUCTION IN CONNECTICUT.

It is not known that any American establishment has conducted an experiment similar to those undertaken in England, or that in American establishments where working time has been shortened any careful account of the resultant effect has been kept. Inquiry did not disclose any such records in Connecticut, at least. But there are many industrial establishments in this State in which the daily hours of labor have been lessened, and many in which the weekly hours have been reduced, during the whole or a portion of the year, by the adoption of the system of closing early on Saturdays.

In the majority of such latter establishments the motive was not to introduce permanently a shorter working day or week, but to afford opportunity, particularly in the summer months, for recreation, and to lessen irregular absenteeism by fixing a time when all might be absent. To some extent the motive might have affected the results, as the workmen were not given to understand that any special exertion or attention on their part might secure for them the boon of a shorter work-day. There was also, in the majority of cases, the depressing effect of a cutting of wages to correspond with the reduction in hours.

Nevertheless, it was found, upon inquiry, that many Connecticut establishments had observed effects, following a reduction in working time, quite similar to those noted in the English experiments. In many establishments there had been no reduction in production, and in others the reduction in product was not commensurate with the reduction in working time. There was also noted, in several establishments, a saving in incidental expense and an economy in operation, caused by the lessening of irregular absenteeism. A study of the returns obtained also brings out strongly the fact that in establishments where the wages of a majority of the employes were reduced to correspond with the reduction in working time, the proprietors were seldom able to report that there had been no reduction in production per employe; while from establishments which did not reduce weekly wages, or in which the major portion of the work was paid for by the piece, the answer was frequently made that the shortened hours had not affected production. Of course, in those establishments there was no falling off in piece-earnings.

In all, about one hundred establishments were visited. Fifty-nine reported that there had been no reduction in production following a decrease in the working hours; thirty-one reported a reduction in product proportionate to the reduction in working time; seven said that there was a slight reduction in product; and six did not specify whether the reduction was proportionate or otherwise.

The returns on this subject obtained by the Bureau have been classified under these subdivisions: Fine Machine Work, Hardware, Britannia or Silver Ware, Other Metal Working, Hats, Corsets, Electrical Goods, Stone-cutting, Wood-working and Miscellaneous. They will be considered in the order given.

Those under the title of Fine Machine Work include establishments producing bicycles, writing machines and other intricate

machinery requiring the service of intelligent mechanics. There are eleven of these establishments, and the replies obtained from them have been thus grouped :

FINE MACHINE WORK.—ESTABLISHMENTS CLOSING AT NOON SATURDAY.

	Plan Adopted When. During how many Months in the Year.	With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establish- ment.
3	1890.	Yes.	* None.	Practically none.	700	Hartford.
2	1890.	Yes.	None appreciably.	† Practically none.	300	"
2½	1890.	Yes.	(No piece-work.)	Less but not proportionate.	100	"
3	1890.	Yes.	Slight reduction.	Proportionately less.	100	"
3	1891.	Yes.	(No piece-work.)	Proportionately less.	35	Stamford,
3	1892.	Yes.	*None appreciably.	(Not answered.)	125	Hartford.
3	1892.	Yes.	(No piece-work.)	Proportionately less.	40	Bridgeport.
12	1892.	No.	(No piece-work.)	None.	20	Norwich.
2½	1892.	Yes.	(No piece-work.)	† Proportionately less.	8	Hartford.
3	1893.	Yes.	Practically none.	† Practically none.	15	"
3	1893.	Yes.	None.	None.	150	"

* Large majority of employees piece-workers.

† Except where automatic machinery is in use.

‡ All work is by machine.

In the larger number of the establishments in the table the reduction in working time (during one-quarter of the year) amounts to four hours a week, the change being from fifty-nine to fifty-five hours weekly; and in all, except one, of the establishments there was a corresponding reduction in weekly wages—that is, the pay was for fifty-five instead of for fifty-nine hours work. It is undoubtedly something more than a coincidence that, of the five establishments not employing piece hands, the one which did not reduce wages as it reduced working time was the only one able to report that there had been no reduction in production per employee. Three others of the five report a proportionate reduction in production (one explaining that all work is by machine), and the fifth

reports a reduction, though not proportionate to the reduction in working time. There was no special incentive for the day hands. They did no more than they were to be paid for doing. On the other hand, where the opportunity was presented to earn as much in the shorter as in the longer time, it was improved. Of the six establishments employing piece-workers, two declare that there was no reduction in piece-earnings, three found no appreciable reduction, and the sixth reports only a slight reduction. Only one of the six reports a reduction in production commensurate with the time reduction; one reports positively no reduction, three say that there was practically none (two of the three finding a reduction in the product of automatic machinery), and one omitted to answer the question. To sum up, of the ten who answer, five assert that there was practically no reduction of production during the shorter working time, and one reports a falling off not proportionate to the time reduction.

All agree in stating that the arrangement is mutually satisfactory. Three find in it a saving in incidental cost; one reports his employes to be earnest in the endeavor to turn out in the shorter time what work is needed; another is enthusiastic in the belief that the Saturday half holiday should be universally observed; an exceptional one is an advocate of the eight-hour work day, and one reports that the arrangement was made at the request of the employes.

HARDWARE. — ESTABLISHMENTS WORKING LESS THAN TEN HOURS DAILY.

Daily Hours of Labor.	When Change Was Made from a Greater No.	With Corresponding Reduction of Day Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual No. of Employees.	Location of Establishment.
9½	1884.	*Yes.	None.	None.	40	Plainville.
8	1888.	†	Hardly any.	†	100	Bristol.
9	1891.	Yes.	Could not answer.	None.	20	New Britain.

* But it is added that pay per hour has doubtless increased sufficiently to permit of as large day wages as before.

† The answer is, "Hardly perceptible." Possibly, explanation in preceding case will apply.

‡ Answer in text.

ESTABLISHMENTS CLOSING AT NOON SATURDAY.

	Plan Adopted When.	With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
■	1886.	Yes.	None.	None.	1,100	Stamford.
8	1888.	Yes.	None.	Less, but not proportionate.	35	Winsted.
3	1891.	Yes.	(No piece-work.)	Proportionately less.	47	Hartford.
3	1892.	Yes.	None.	None.	130	South'n.
*12	1892.	Yes.	None.	Practically none.	325	Norwalk.

* This establishment closes at 3 P. M. on Saturday.

Of the eight hardware establishments from which returns were obtained, three have a shorter work-day throughout the year, and five close early on Saturdays, four of them during a quarter of the year and the other throughout the year.

Of the three establishments working less than ten hours daily, the one working nine hours and the one working nine and a half hours make positive statements that the time reduction was not accompanied by a reduction in production, though the managers of the nine and a half hour establishment think that any further reduction in working time would involve a reduced product. There was no reduction in piece-earnings in the latter establishment. Conditions in the nine-hour establishment would not permit of a positive answer to that query. The managers of the eight-hour shop found little difference in piece-earnings between the longer and the shorter day. They believe that, during an extended period, production would be as large in a nine-hour as in a ten-hour working day, and were not positive that the same could not be said as to an eight-hour day, but conditions existing in the establishment did not facilitate the answering of the questions. It was certain, however, that the pay-rolls were as large during the eight-hours-a-day period as they had been before.

As the table shows, one of the hardware establishments closing earlier than usual on Saturdays closes at 3 P. M. Though the

weekly reduction of time is less than in the other four establishments, the arrangement continues throughout the year, and therefore the experience is valuable. In this class of establishments, as in those devoted to fine machine work, results appear to be conditional upon liberality of compensation. The one establishment having no piece-work, and which reduced wages as it reduced working-time, reports a corresponding reduction in production. Of the other four, two say that there was no decrease in production, one reports practically no decrease, and one that the decrease was not proportionate with the time reduction. The managers of the latter establishment believe that the arrangement is to their advantage. Under it they receive from the day-hands more than the previous per hour ratio of production. The four agree that there was no reduction in piece-earnings. The proprietors of the largest establishment, where there was no reduction in production, because of the reduced working time, report that, in addition, there was a large saving in incidentals.

BRITANNIA, OR SILVER WARE.—ESTABLISHMENTS CLOSING AT NOON SATURDAY.

During How Many Months in the Year.	Plan Adopted When.	With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
2	....	Yes.	.....	Proportionately less.	150	Hartford.
3	1887.	Yes.	Proportionately less.	Proportionately less.	150	"
5	1889.	Yes.	Less.	Less.	100	Bridgeport.
12	1892.	Yes.	None.	Slightly less.	100	Glastonbury.

Each of the four establishments report a reduction in product, two of them giving the decrease as proportionate to the time reduction, one reporting it unqualifiedly as less, and the fourth as slightly less. The latter establishment, which runs five and a half days weekly throughout the year, is the only one of the four to report no reduction in piece earnings. Like the others, it reduced the weekly wages as it reduced the working-time. The advantage which it

finds in the Saturday half-holiday system is the lessening of absenteeism. Employes who desire part of a day during the week for recreation wait for the enforced half-holiday on Saturday, rather than lose a portion of two days. Thus the shop operations proceed with less friction, and with less of the delay consequent upon the absence of some parts of the producing organization. There is naturally a resultant effect in the volume of production.

Another of the silver-ware establishments, which reports a reduction in piece-earnings and in product proportionate to the reduction of five hours a week in working time, had previously run fifty-nine hours weekly (ten hours daily for five days and nine hours on Saturday), paying the day-hands the same amount for the nine-hour as for the ten-hour day. Under that arrangement the product in the fifty-nine-hour week was as large as it had been in the sixty-hour week, and the piece-earnings were not less.

A silver ware establishment, employing twelve people and not grouped with the others in the table, has worked nine hours a day since 1892. The reduction from ten hours was accompanied by a reduction in daily wages, the pay being by the hour. Piece-earnings and product are reported to have dropped proportionately with the time reduction. The explanation given by the proprietor is that nearly all the work in the establishment is on automatic presses, whose output per hour cannot be increased. Under such circumstances, to decrease the working time is to decrease the product per employe.

OTHER METAL-WORKING.—ESTABLISHMENTS WORKING LESS THAN TEN HOURS DAILY.

		With Corresponding Reduction of Day Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
Daily Hours of Labor.	When Change Was Made from a Greater Number.					
9	1883.	Yes.	Proportionately less.	*Proportionately less.	85	Southington.
9	1884.	No.	None.	None.	22	Plainville.
†9	1886.	No.	None.	None.	125	Wallingford.
9	1886.	No.	(No piece-work.)	Proportionately less.	12	New Haven.
9	1890.	No.	(No piece-work.)	Proportionately less.	75	New Haven.
9	1890.	Yes.	(No piece-work.)	Very little.	10	Norwalk.
9	1890.	No.	None.	None.	85	Guilford.
9	1892.	No.	(No piece-work.)	None.	27	Bridgeport.
9	1892.	Yes.	Proportionately less.	Less.	60	Hamden.

* Except in mill, where work is by tonnage.

† Eight hours on Saturday.

ESTABLISHMENTS CLOSING AT NOON SATURDAY.

		With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
During How Many Months in the Year.	Plan Adopted When.					
3	1891.	Yes.	(No piece-work.)	Proportionately less.	60	Southington.
5	1891.	Yes.	Hardly perceptible.	*Hardly any.	50	Hamden.
†12	1892.	Yes.	(No piece-work.)	Proportionately less.	50	Hamden.
3	1892.	Yes.	Proportionately less.	Proportionately less.	75	Winsted.

* Except in use of automatic machinery.

† Fifty hours weekly during winter months.

Of the nine establishments working less than ten hours daily, the four which report no change in production because of the reduced working-time made no change in the day wages. A comment accompanying one report is that a further reduction in time would cause a reduction in product. One of the four has no piece-hands, and the other three noted no change in piece earnings. Two of them report the advantage of a saving in incidental expenses because of the shorter day, and two direct attention to a gratifying spirit among the employes, whose wages remained the same, to make the product of the nine-hour day equal that of the ten-hour day. Three establishments report that product was reduced proportionately with the working-time, though in two of the establishments wages were not cut down with the hours. One of these negative answers is qualified by the statement that reduced hours did not mean reduced product in a department where the product is measured by weight. In another one of the three the foreman disputed the opinion of the proprietor that there had been a proportionate falling off in the out-put.

Among the establishments closing at noon Saturday, the one which noted hardly any change in product or piece earnings as between the longer and the shorter weeks, was pleased with the arrangement because of the lessening of absenteeism and the consequent more efficient operation of the mill. Three establishments claim a proportionately reduced product, one of them reporting also a proportionate lessening of piece earnings. An employe of the latter establishment, questioned on the subject, replied that the men "knew better than to earn more than regularly, for we are sure we should be cut down if we did."

HAT-MAKING.—ESTABLISHMENTS CLOSING AT NOON SATURDAY.

		Plan Adopted When.	With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
12	1890.	Yes.		None.	*None.	200	Norwalk.
12	1890.	Yes.		None.	None.	12	"
12	1890.	Yes.		None.	None.	100	"
12	1890.	Yes.		None.	None.	150	"
12	1891.	Yes.		None.	None.	60	"
8	1891.	†....		None.	None.	10	Danbury.
12	1892.	Yes.		None.	None.	60	Norwalk.
†12	....	Yes.		Proportionately less.	Proportionately less.	20	Danbury.

* Except where machinery is used.

† All piece-work.

† Closing at 3 P. M. Saturday.

It should be said, in explanation, that four of the establishments included in the table have the early Saturday closing hour for the hat-makers only, the other employes working until the usual hour for closing; and that one other of the establishments requires only eight hours daily on the part of the hat-makers, and closes at noon on Saturday for all of its employes.

In this class of factories day-labor forms only a small fraction of the whole, so that the reduction of weekly wages to correspond with the reduction in working-time affected only a small proportion of the employes. This condition undoubtedly affected the result as to production. As the table shows, only one establishment, and that one running more hours weekly than the others, reports a proportionate loss, either in product or in piece earnings, because of reduced working-time. All the others agree that the change in working hours had no effect on the piece earnings or the product per employe.

Another Norwalk hat-factory, not included in the table, and employing usually 400 people, which since 1890 has employed hat-makers eight hours daily and other employes ten hours, reports no

loss in piece earnings or in production per employe, because of the reduction in working-time daily from ten to eight hours. In addition, the proprietors report a most kindly reciprocal feeling on the part of the hat-makers.

CORSET-MAKING.—ESTABLISHMENTS CLOSING AT NOON
SATURDAY.

During How Many Months in the Year.	Plan Adopted When.	With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
12	1891.	Yes.	Slightly less.	Slightly less.	250	Bridgeport.
12	1892.	Yes.	None.	None.	50	"
8	1892.	No.	None.	None.	800	"
12	1894.	Yes.	None.	*None.	1,400	"

* Except in product of automatic machinery.

Of these four establishments, employing a large number of people, only one reports a reduction in product per employe because of lessened working time. In that establishment the reduction was slight, and the proprietors expressed themselves as satisfied with the arrangement. The proprietors of two other of the establishments expressed a hope that the shorter work-day would soon become universal. One establishment found from the plan a positive saving in incidentals.

ELECTRICAL GOODS.

Reports under this heading were had from two establishments—not enough to tabulate. One, located in Manchester and employing 150 people, began in March, 1894, the practice of closing at noon Saturday, proposing to continue the plan indefinitely. To day hands fifty-five hours pay was given for fifty-five hours work, but it is reported that the wages were so adjusted as to satisfy the employes. The proprietors report that the employes reciprocated the concessions as to working time and wages, and that there was no falling off in piece earnings or in product per employe during the shorter working week.

The other establishment, located in Bridgeport and employing thirty-five people, all paid by the hour, reports that production is proportionately less during the three months when the establishment closes at noon on Saturday. The early Saturday closing arrangement has been in operation here since 1891.

STONE-CUTTING.—ESTABLISHMENTS WORKING LESS THAN TEN HOURS DAILY.

Daily Hours of Labor.	When Change Was Made from a Greater Number.	With Corresponding Reduction of Day Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
8	1885.	Yes.	(No piece-work.)	Slight reduction.	5	Middletown.
9	1886.	No.	" "	Proportionately less.	25	New Haven.
*9	1886.	No.	" "	None.	4	" "
9	1886.	No.	" "	Less.	22	" "
8	1886.	No.	" "	None.	15	Waterbury.
8	1887.	No.	Reduced ten per cent.	Could not answer.	25	New Britain.
8	1887.	No.	(No piece-work.)	Slight reduction.	14	Waterbury.
*9	1887.	No.	" "	Less.	8	Meriden.
*9	1887.	No.	" "	None.	8	"
8	1888.	No.	" "	"	8	New Haven.
9	1888.	No.	None.	"	15	Norwich.
8	1889.	No.	(No piece-work.)	"	8	Groton.
8	1889.	No.	" "	"	120	Waterford.
9	1889.	No.	" "	"	18	Groton.
8	1889.	No.	" "	"	40	Waterford.
8	1890.	No.	" "	"	8	Norwich.
9	1890.	No.	" "	"	8	Bridgeport.
8	1891.	No.	" "	"	10	"
8	1892.	No.	None.	"	500	Branford
*9	1892.	No.	"	"	600	"
8	1892.	No.	"	"	250	"
8	1892.	No.	"	"	400	Guilford.
8	1892.	No.	"	"	6	Middletown.

* Eight hours on Saturday.

Of the twenty-three stone-cutting establishments working nine hours daily, from which reports were obtained, four cut off an additional hour on Saturday, making the number of hours for the week fifty-three. The reduction of the daily working time in this industry is largely the result of agitation in the building-trades unions. It was done in response to a concerted demand on the part of the employes, and was effected without a corresponding reduction in the wages. Only one of the twenty-three establishments in the table reports a wage-reduction. That establishment also reports a slight falling off in production consequent upon the lessening of the working hours. One other establishment reports a slight reduction in production; two that production was less, not specifying the proportion, and one of the two offering the explanation that much of the work was done by "cheap help;" while only one reports a reduction in product corresponding to the time reduction. The others, seventeen in number, report that production remained the same.

In only a few of the establishments is work done by the piece, work so paid being generally lettering. Six establishments doing such work report no reduction in piece-earnings because of the shorter day. The proprietor of a seventh establishment reported a proportionate reduction, but this was disputed by his accountant.

It should be added that the proprietors of two establishments expressed themselves in favor of a further reduction to eight hours daily, or forty-eight hours per week, stopping at noon Saturday.

**WOOD-WORKING.—ESTABLISHMENTS WORKING LESS THAN TEN
HOURS DAILY.**

Daily Hours of Labor.	When Change Was Made from a Greater Number.	With Corresponding Reduction of Day Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
9	1886.	No.	(No piece-work.)	Proportionately less.	80	New Haven.
8	1889.	Yes.	" "	" "	50	" "
9	1890.	No.	" "	10 per cent. less.	28	New Britain.
9	1890.	"	" "	" "	10	" "
9	1890.	"	" "	None.	28	Meriden.
9	1890.	"	" "	10 per cent. less.	100	"
9	1890.	"	" "	None.	12	Wallingford.
9	1890.	"	" "	Proportionately less.	28	Hartford.
9	1890.	"	" "	None.	9	"
9	1890.	"	" "	"	28	"
9	1890.	"	Proportionately less.	Proportionately less.	12	"
9	1890.	"	(No piece-work.)	" "	8	"
9	1890.	"	" "	" "	14	"
9	1890.	Yes.	" "	" "	15	New Haven.
9	1890.	"	" "	None.	4	" "
9	1891.	*No.	" "	10 per cent. less.	50	Meriden.
9½	1892.	"	" "	None.	15	New Haven.
9	1892.	"	None.	"	35	Bridgeport.
9	1892.	"	(No piece-work.)	"	9	Middletown.
9	1892.	† "	None.	Slightly less.	110	Stamford.

* Until fall of 1893.

† Seven and a half per cent. increase per hour to balance shorter time.

In this industry, as in stone-cutting, the time reduction was largely the result of agitation and demand. Consequently wages were not correspondingly reduced. Only three establishments report wage reductions. From two of these and from nine others there are reports of a proportionate, or ten per cent. reduction in production. One other reports product as slightly less, while eight

observed no reduction. Of the three establishments paying piece-wages for a portion of the product, one reports a proportionate reduction in piece earnings and two no reduction.

The proprietors of six establishments (in two of which product had been reduced) expressed themselves as heartily in favor of the shorter work-day, and as hoping for its adoption in other industries. One gentleman added that since adopting the plan his establishment had not been closed a day, except on holidays and for repairs. One employer regarded the shorter day as decidedly to his disadvantage, while another felicitated himself over his increased profits.

A Stamford wood-working establishment, employing thirty people, and not included in the table, has closed Saturdays at noon during June, July and August since 1892. Wages per hour are reduced correspondingly, and proportionate reductions in piece-earnings and in production are reported.

MISCELLANEOUS INDUSTRIES.—ESTABLISHMENTS CLOSING AT NOON SATURDAY.

During How Many Months in the Year.	Plan Adopted When.	With Corresponding Reduction of Weekly Wages.	Effect of Time Reduction on Piece Earnings.	Effect of Time Reduction on Production per Employee.	Usual Number of Employees.	Location of Establishment.
3	1890.	Yes.	Hardly any.	* None.	200	Bridgeport.
4	1890.	"	None.	"	125	Winsted.
12	1891.	No.	(No piece-work.)	"	50	Meriden.
12	1891.	† ..	Hardly any.	Hardly any.	50	Norwalk.
4	1891.	Yes.	Slightly less.	Slightly less.	175	Hartford.
4	1891.	"	Less.	Less.	50	Bridgeport.
3	1892.	"	None.	† None.	60	Hartford.
2	1893.	"	(No piece-work.)	Proportionately less.	15	New Haven.
§ 3	1893.	"	Proportionately less.	" "	600	Hartford.

* Except in the use of automatic machinery.

† All piece-work.

‡ Except in results from "cheap help."

§ In 1894 closed all of Saturdays for three months.

The miscellaneous, or unclassified establishments in the table include a silk mill, a rubber mill, an elastic-webbing shop, a cut-glass shop, a fire-arms factory, and shops producing advertising novelties, asbestos packing, emery wheels and undertakers' supplies. Only two of the establishments report a reduction in product proportionate to the reduction in working time, and in one of the two all work is paid by the hour and the wages of all employes were reduced. One other establishment which has no piece-work, but which did not reduce wages, reports that production remained the same. No change in production was reported by four establishments, an unspecified reduction by one, and a slight reduction by two. Of the seven establishments employing piece-workers, only one reports a reduction in piece earnings commensurate with the reduced working time. In two there was no change in piece earnings, in two others a slight reduction, and in one an unspecified reduction. Only one of the nine establishments expressed decided disapproval of the plan of reduced working time. Four were warmly in praise of it, one finding an economy in incidentals and two in lessened absenteeism. A fifth would be satisfied with the arrangement, if his competitors would adopt it.

Two establishments working nine hours daily are not included in the table. One, a New Haven button shop employing ten people, which has no piece-hands, and which reduced wages as it reduced working time in 1890, reports no reduction in production thereby. The other, a Bridgeport varnish factory, employing twenty-eight people, reduced the number of hours in 1892 but made no change in day wages. It reports no falling off in piece earnings or in product, and is satisfied with the results.

TRADE AND INDUSTRIAL EDUCATION.

For years the subject of establishing schools in which the theoretical and practical knowledge necessary to the mechanic arts should be taught, has been perfunctorily discussed in Connecticut, but so far the agitation has had no tangible results. It seems strange that in a community dependent almost entirely upon its factories, and among citizens who are above all practical, the admitted necessity for such institutions should not have resulted before now in their establishment. The main cause seems to be the impression that private generosity is the only proper source upon which technical education of this character should rely, and that such schools should find their foundation only in public spirited and progressive individuals who will give of their substance, or in the bequests of those who remember other than relatives in their wills. Those who acknowledge the great good to be accomplished by technical schools and the injury that is being done, even from a material standpoint, by the delay, have become restive under this policy of procrastination and assert that it is time the State assumed the responsibility. This impression has been growing rapidly of late, thoughtful men have concluded that it is no longer profitable to theorize and wait, but that the time has come for action and that Connecticut should provide by statute, either for the establishment of a school of this character at some central point, entirely under the auspices of the State, or for State aid where individuals or school boards make partial provision for their maintenance. This sentiment found expression in a petition to the last General Assembly for the establishment of a "State School of Mechanic Arts." The subject was discussed before the Committee on Education, several hearings were held at which self educated mechanics appeared and made practical arguments in support of the project, but no action ensued. The advantages of schools of this character were freely admitted but knowledge in reference to details and of

the proper manner of providing for them seemed to be wanting. In order to provide this information, to give an idea of what is being done elsewhere, and to outline the plan and scope of trade and technical schools where their success is admitted, and their necessity no longer questioned, the Bureau publishes the information that follows.

THE APPRENTICESHIP SYSTEM.

There is no doubt of the fact that the system of apprenticing boys to learn trades, as it was once known, has gone, never to return. The changed conditions of the modern industrial world, which find their cause principally in labor saving machinery and the subdivision of labor, have abolished this method of acquiring a trade. Formerly an effort was made to teach the boy a trade in its entirety, but now this is seldom attempted and in many trades would be almost impossible. The old apprentice system, at its best, taught only practically, leaving the scholar to grope for the theory that should supplement manual skill. Its only effort was to teach how, and why was a question with which it had no concern. The basis of the apprenticeship system was the personal supervision of the employer. That, under present conditions, the young mechanic can no longer have. The manager is usually a busy man with many business cares and obligations that preclude personal intercourse or contact with his employes. Consequently the boy is turned over to a journeyman who may be incompetent or who may not wish to impart information. He is employed to make himself useful, he feels but little sense of obligation, being free to go when he pleases, and he is expected to learn by observation and by such practice as he can get. As a rule when he becomes proficient in some particular branch, or expert in the management of a machine, he is kept at this work for the benefit of his employer but to his detriment. He may learn much or he may learn little in exact ratio to his opportunities and the interest taken in him by the foreman or journeyman. When we reflect that the fortune of an apprentice depends upon his skill, the short-comings of the present method, if it can be called a method, are at once apparent. The fact is that few conscientious master mechanics desire to assume the responsibilities imposed upon them by the apprenticeship laws, and few parents would consent to the restrictions and long term of service necessary in order to legally bind their children out as apprentices. The indenture came to be regarded as a form of slavery, hence we

seldom hear of one now. An effort was made, however, under the old system, to teach a trade thoroughly, while under present conditions no such object is in view. There is just as much necessity now, and perhaps more, as existed in former years for skilled mechanics and the problem now is how to produce them. The apprenticeship system has been set aside and repudiated but its object can not be ignored because its methods are obsolete. Some provision must be made for a substitute, and an argument to prove this hardly seems necessary in Connecticut, whose industries and material prosperity are mainly dependent upon the skill and intelligence of its mechanics and artisans.

THE SUBDIVISION OF LABOR.

Modern methods of manufacturing are not calculated to create mechanics that are familiar with all the branches of their trades. Workmen become specialists at the expense of the general knowledge they were once supposed to possess. They become familiar with one machine, with one operation or with one process and their trade education stops there. The indications are that this tendency will increase rather than decrease and that many workmen will become merely automatons. Their technical knowledge will be extremely limited and as a result their earning ability will be correspondingly restricted. They cannot hope to get the comprehensive idea of processes and operations that underly the thorough familiarity with a trade, and this deficiency must be supplied if they are to be intelligent workmen instead of attachments to a machine. This phase of the problem is entitled to much attention and its only solution seems to lie in a provision to supply, outside of the factories, facilities for the acquisition of knowledge that cannot be secured in them, and without which no workman can be called a thorough mechanic. Such facilities will do much to bring about a higher appreciation of the dignity of labor. The mechanic and artisan undoubtedly occupied a higher place in the social scale a generation ago than now and industrial education will surely result in a recognition of the fact that the men who create are entitled to all honor and respect. The idea has been too prevalent that the sometimes grimy worker is inferior to the clerk and salesman, but education would dissipate it and increase the respect for labor which always comes when labor respects itself. We have assumed that the mechanic, simply as such, is to be set

down as an ignorant or uneducated man. Remove this impression by providing for his education and training and the distinctions now complained of will be removed.

TECHNICAL AND TRADE SCHOOLS.

Schools that teach trades and impart technical knowledge seem to be a necessity. It would therefore be wise for the State to act in this respect and to provide at least one institution of this character, which if it succeeds, will become a nucleus around which others will gather. Connecticut was early in the field with a normal school, designed to train teachers, being the second State to establish one, and soon we are to have four such schools. There is no doubt of the good done by the normal schools and that the wisdom of their establishment has been fully justified by the results. But if it is considered a duty by the State to provide technical education for those who intend to teach in the public schools, why would not a collateral assumption obtain that it should do at least as much for its mechanics and industrial prosperity? The State has also established a technical school for the education of farmers which is accomplishing much good in grounding agriculturists in the theory as well as the practice of their calling. If such a school is needed in Connecticut, and is doing good work, are we not forced to the conclusion that a trade school is much more of a necessity and that its opportunities are a hundred fold greater? There may be an excuse for maintaining an agricultural school exclusively in some of the western and southern States, which rely almost solely upon the product of their farms, but certainly there is none for this distinction in Connecticut whose prosperity is chiefly found in its great mills and factories. Even the public school system, if we except the tendency towards manual training, a matter of recent growth, ignores the fact that the greater part of the pupils will become tradesmen. The high schools which now form the apex of our public system in the larger towns are in reality technical schools. They endeavor to impart an education that will fit for college and their whole effort is to put youth in line for the professions or for business pursuits. This is commendable and proper enough when regarded from the view point of the children who desire and aspire to such careers, but it seems to be a waste of time when the needs of those who are to enter the factories and become mechanics are considered. If a parting of the ways was made in beginning every high school course, at which the pupils could elect whether they

desired to acquire a liberal education or to devote themselves to technical training, a great advance would be made. As it is now the preliminary training of almost every calling is provided for except that of the mechanic. He alone is left to absorb outside, and in an imperfect manner, what the schools endeavor to provide for others. When we consider his importance to the State we cannot but admit that the State is under obligations to at least attempt to do as much for him as it essays to do for others. Whatever the plan of accomplishing this may be, it should not only leave the common school intact but should supplement and encourage it in its legitimate work. Technical training, if we perhaps except manual training as a part study, should not commence until the pupil has a good common school education as a foundation upon which to build. It should bridge the gap between the schoolhouse and the workshop. At the age of fourteen or fifteen a boy should have acquired sufficient education to enter a school designed to teach him in detail the essential principles of his chosen trade and calling, and to give him the actual practice which should always be combined with theory. What is wanted is not an institute of technology—there are many institutions in which the higher scientific education can be had now—but a school that will give to those who must begin work early in life an impetus that could only be acquired by years of practice, if at all, under present conditions. Colonel Auchmuty, in a recent address to the American Social Science Association, put the necessities of the situation in the following words :

“All of us, it can safely be assumed, believe in schools for the young and in colleges for the more mature ; in law schools, in medical schools and divinity schools ; in schools of art, of architecture, of engineering and of mining ; in agricultural and business colleges ; in schools of telegraphy, stenography, and of cooking and sewing. We all believe that the young should begin in every calling where the old left off, and not go over the weary road of re-discovering what was discovered long ago. We all believe, on general principles, in schools of everything that men need to learn, although, probably, many of us are not certain whether the mechanic arts, a branch of knowledge in the exercise of which more than one out of every five of the fifteen millions of men who are doing the work of this country find employment, can be taught in a school.

“Should information be sought from those who as masters of their trade might be regarded as experts, contradictory opinions would be given. All would admit that some training otherwise than that which can be had in a workshop is necessary : yet many would

say that trade instruction should merely supplement the workshop, and that the old plan by which a lad was bound by an indenture to remain with his employer for a term of years was the best. Others would tell you, and the number grows greater every day, that the time has come and the need is great for a new departure; that the trades must come into line with the professions, and that the trade-school must do for the mechanic arts what the professional school has done for the professions."

THE NEED OF SUCH SCHOOLS.

What is wanted is training in the mechanic arts in truth and fact, with no more of book learning insisted on as a part of the course than is necessary to an intelligent use of the brains and muscles in the mechanical work to be done in after life. We want more of the ungloved kind of labor with the education, which will not make the man ashamed of having his hands tanned or soiled. There would be work enough for all of this sort, under ordinary conditions, while there is not enough of the kind that is miscalled respectable by comparison. This is a practical age, and the workman with a trained brain, allied with skillful hands, is more in demand than the youth who has more or less education in the kind of things that the world wants little off. Trade schools are not an untried invention; France has added much to her prosperity by means of them, Germany has recently proved a formidable competitor to England by reason of her trade schools, and England has recently awoke to the situation and commenced to apply the remedy by setting up similar schools. If American workmen are to compete with foreign artisans, they must be as well equipped, and the trade school is the proper instrumentality for doing it.

Isaiah V. Williamson, of Philadelphia, who established the Williamson Free School of Mechanical Trades, in his foundation deed, plainly and explicitly sets forth his impressions and desires in relation to trade schools. A portion of that document reads as follows:

"I am impressed with the belief that in many worthy institutions founded for the free education of the young, and sometimes even in the public schools, the system and course of education, and the associations and surroundings connected therewith, often unfit a young man for a life of manual labor, and induce a false belief in his mind that to labor with his hands is not respectable—and that for this reason professional and mercantile pursuits are overcrowded with incompetent candidates who meet with failure—and thus many who, if they had been differently trained in early life, could have

supported themselves at some trade in comfort and decency, are condemned to idleness and often to dissipation, beggary and crime.

"For nearly thirty years I have carefully considered this subject, with the intention at the proper time of founding and endowing a free institution, to be located in the city of Philadelphia or its vicinity, where, subject to the control of proper managers and under the direction and supervision of skillful and expert instructors, poor and deserving boys could be gratuitously instructed in the rudiments of a good English education and what is of equal, if not greater, importance, trained to habits of industry and economy and taught such mechanical trades or handicrafts as may be suited to their several capacities, so that when they arrive at manhood they may be able to support themselves decently by the labor of their own hands, and become useful and respectable members of society; as I am well convinced that in this country any able-bodied young man of industrious and economical habits who has learned a good mechanical trade, can not only earn a good living and acquire an independence, but also become a useful and respected citizen."

Dr. W. T. Barnard, well and favorably known in this country as an educator, the Normal school system of the state owing its origin to him, says: "Skilled labor must be had from some source, and we cannot afford to import it in bulk, if for no other reason than its expensiveness. Our own people have the first claim upon our industrial occupations, but if we are to compete for foreign trade, they must be so trained as to make and keep them, in knowledge and skill, at least the equals of foreign workmen." Richard D. Ely, Ph. D., an eminent student of economic problems, is pronounced as to the necessity for industrial education. In his opinion "industrial training, not for the few, but for all people, for every boy and girl born in the United States, without one exception, is the chief economic demand of our time. Comparatively little is attained by picking out a few here and there and elevating them above the masses by technical schools. We want to extend the benefit of industrial schools to all alike."

An act of Congress, passed in 1862, granted land and land script to each state for the establishment of colleges of agriculture and the mechanic arts. It was the interpretation of this law that led to a difference of opinion between Yale University and the Storrs Agricultural School, which called for action by the General Assembly and adjudication by the courts. It is a fact that in many states the institutions founded on this grant have become purely literary, but the indications are that they will soon become the great technical schools of the country. The states have full power to regulate the

courses of study in these schools, as is made evident from the following extract in the law: "The leading object shall be to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes, in the several pursuits and professions of life." It would seem as if Connecticut, in its use of this fund, could be more practical than it has been.

ACTION IN OTHER STATES.

Several states have statutes permitting industrial and trade education in the public schools, but, as a rule, they are not of a character that will encourage such training. They practically admit the advantages of such an education, but stop there. In Massachusetts, for instance, the following law, which is a good illustration of legislation of this character, is on the statute book:

"A town may establish and maintain one or more industrial schools, which shall be under the superintendence of the school committee, who shall employ the teachers, prescribe the arts, trades and occupations to be taught therein, and have the general control and management thereof; but they shall not expend for any such school an amount exceeding the appropriation specifically made therefor, and shall not compel any scholar to study any trade, art, or occupation without the consent of his parent or guardian; and attendance upon such school shall not take the place of the attendance upon public schools required by law."

New Jersey has passed a law of a different character, which, in turn, can be safely taken as a sample of its class. It is much better than the Massachusetts statute, inasmuch as the restrictions are not as great, and provision is made for state aid, but it is not perfect. If the state recognizes the value of industrial education, it can better afford to provide for it thoroughly and solely, than to grant tentative support predicated upon personal subscriptions or town aid. In other words it does not seem to be good policy for the state to say that the object is necessary and commendable, but that it is only worth half doing. The law is as follows, its title being, "An Act providing for the establishment of schools for Industrial Education:"

"That whenever any board of education, school committee or other like body, of any city, town or township, in this state, shall certify to the Governor that a sum of money, not less than three thousand dollars, has been contributed by voluntary subscriptions of citizens or otherwise, as hereinafter authorized, for the establish-

ment in any such city, town or township, of a school or schools of industrial education, it shall be the duty of said Governor to cause to be drawn, by warrant of the Comptroller, approved by himself, out of any moneys in the state treasury, not otherwise appropriated, an amount equal to that contributed by the particular locality as aforesaid for the said object ; and when any such school or schools shall have been established in any locality as aforesaid, there shall be annually contributed by the State in manner aforesaid, for the maintenance and support thereof, a sum of money equal to that contributed each year, in said locality for such purpose ; *provided*, however, that the moneys contributed by the State, as aforesaid to any locality, shall not exceed in any one year the sum of five thousand dollars.

"All moneys raised and contributed as aforesaid, shall be applied under the direction of a board of trustees, organized as hereinafter provided, to the establishment and support of schools for the training and education of pupils in industrial pursuits (including agriculture), so as to enable them to perfect themselves in the several branches of industry which require technical instruction.

"Any city, town or township shall have power to appropriate and raise by tax, for the support of any such school therein, such sum of money as they may deem expedient and just.

"There shall be a board of trustees of each of such schools, which shall consist of the Governor, *ex-officio*, who shall be President thereof, two persons selected by the State Board of Education, two by the citizens and associations contributing, two by the Board of Education, School Committee or other like body, of the locality where such school is established, and one by the Common Council, Township Committee or other governing body thereof, if such city, town or township shall contribute to the maintenance of such school. The said Board of Trustees shall have control of the buildings and grounds owned and used by such schools, the application of the funds for the support thereof, the regulation of the tuition fees, the appointment and removal of teachers, the power to prescribe the studies and exercises of the school and rules for its management, to grant certificates of graduation, to appoint some suitable person treasurer of the Board, and to frame and modify at pleasure such by-laws as they may deem necessary for their own government ; they shall report annually to the State and local Boards of Education their own doings and the progress and condition of the schools.

"Said trustees shall receive no compensation for their services ; but the expenses necessarily incurred by them in the discharge of their duties shall be paid upon the approval of the Governor."

THE OPPORTUNITY OF CONNECTICUT.

Connecticut has an opportunity to lead in the thorough grafting of a system of trade or industrial schools upon the public school

system. Several states, as before stated, have legislated on the subject, the statutes being mainly of a permissive character, but Connecticut can be first in doing the work thoroughly, just as it was the pioneer in recognizing by law the value of manual training as an adjunct to the usefulness of the public schools. Public high schools devoted to manual training or instruction in the mechanic arts have been established in Baltimore, Philadelphia, Cleveland, Toledo and other cities, but they have mainly grown from local enterprise, and have not had the advantage of State auspices. Massachusetts extends financial aid to the Massachusetts Institute of Technology, in return for which that institution grants twenty free scholarships, which are apportioned by Senatorial districts. This, while a recognition of the value of high class technical education, stands in the same relation to the necessities of the masses of the people as a university education does. If an industrial education is to have recognition as a corollary of a high school training, the state should pave the way by providing such a school, if for no other motive than to furnish an object lesson. If Connecticut established one great industrial school, to which all boys desirous of becoming skilled workmen were welcome, and which grounded them in the theory and practice of their chosen mechanical avocation, she would indeed be taking a pronounced step, but it would be in the right direction, and the example would be quickly followed by other commonwealths. With this done and its benefits manifested, there would be no doubt of the extension of the system, and no optimism in the prediction that such institutions would soon become an integral and important ultimate of the common school system in every manufacturing center in the State. The desirability of such a consummation is universally admitted, the only difference of opinion being as to methods.

IN THE UNITED STATES.

An idea of the value of trade and technical schools, and of the desirability of their extension, can be had from a study of the methods and results of the few already established in this country. They are mainly in the large cities, and, as a rule, are supported either by the generosity of public spirited citizens, tuition fees, or both. Facts in relation to some of these schools have already been briefly set forth, and they are more fully supplemented by the following information in reference to the most prominent ones. The

data has been gathered from the Eighth Annual Report of the National Bureau of Labor, to which reference should be made by those desirous of more extended information; the prospectuses issued by the schools, personal correspondence and inquiry.

BOARDMAN MANUAL TRAINING SCHOOL, NEW HAVEN.

In adapting educational methods to the possible future needs of the pupils, the Boardman Manual Training School of New Haven, opened in September, 1894, stands almost alone among elementary educational institutions in Connecticut. Its erection was an important step in the direction of scientific training. It is not a trade school, but pupils who leave it after a three years' course will have a scientific knowledge of the elements that underlie many of the industrial trades. They will have a knowledge of drafting, of drawing, of wood-working, of metal working, of wood carving, of clay modeling, of dressmaking and of cooking. An hour and a half daily of shop work will have trained the hand and the eye as well as the mind, and have put into practical operation many of the things learned in the class room or the laboratory during the other four and a half hours of the school day. The method will develop—and that, too, on scientific lines—the latent talent in the pupils. The wood-working on the part of the boys, which proceeds from bench-work to wood-turning and thence to pattern-making, leads ultimately to the molding of the patterns in the foundry and the casting of the same in metal. The wood-carving on the part of the girls is followed by modeling in clay. The work in the mechanical drafting room leads naturally to machine work, when the object or the machine drafted on paper is reproduced in metal. The free-hand drawing is the preliminary step to designing, to result, it is hoped, before the end of the three years' course, in the ability to design textiles, wall paper, oil cloth and the like. The boys will also be expected to take designs, made here by themselves, into the forge shop and reproduce them in forgings, while the girls will be expected to create artistic costumes from original designs. The girls are also taught cooking, not of the fancy variety, but plain cooking, the aim being to instruct in the preparation of palatable dishes from inexpensive materials, the philosophy and the chemistry of food being also an important part of the curriculum. The practical shop work is accompanied by class-room instruction in the higher mathematics, history, physical geography, English, German

and French, the principles of mechanism and the mechanics of materials, and by laboratory instruction in physics, chemistry and electricity, the work in the latter branch to be made practical by the installation of an electrical plant. The school occupies a position between the grammar schools and the trades, as the ordinary high school is between the grammar schools and professional and mercantile life. It is anticipated that a three years' course in the training school will shorten by two years the time necessary to become proficient in a trade, while giving the ambitious pupil much that the average tradesman has reason to regret that he does not know.

NEW YORK TRADE SCHOOLS.

In 1881 the New York Trade Schools were established in New York city, at the corner of First avenue and Sixty-eighth street, by Col. Richard T. Auchmuty, a gentleman of means, who has given much attention to labor problems. His investigation of the questions involved led to certain definite conclusions, and these he proceeded to put into practical form by founding schools for the purpose of giving young men instruction in certain trades, and to enable young men already in their trades to improve themselves.

Here courses of instruction are given at very moderate charges in bricklaying, plastering, plumbing, carpentry, house, sign and fresco painting, stone cutting, blacksmithing, tailoring and printing. There are both day and evening classes. The thoroughness of the instruction given in each of these trades, it is claimed, leaves nothing to be desired. For example, in the bricklaying class the manual instruction will be in building eight, twelve and sixteen-inch walls; in turning corners and building walls intersecting at different angles; in building piers, arches, flues, fire-places; in setting sills and lintels; in corbelling, etc.

The scientific instruction is upon the strength of walls, construction of flues, thrust of arches, mixing and properties of mortar, cement, etc. The scientific instruction is given by means of lectures illustrated by experiments, and by carefully prepared manuals.

In the bricklaying classes the young men are taught first how to handle the trowel and how to spread mortar. After this they are practiced on eight and twelve-inch walls. When these can be carried up plumb and the courses laid level the class is put upon walls returned at right angles, piers, arches, fire-places and flues. Great care is exercised that each brick is properly laid, and that the joints

are neatly pointed. No attempt is made to work fast until towards the close of the course, when an hour is given, at stated intervals, to ascertain how many brick each member of the class can lay in that time in a workmanlike manner on a straight wall. The brick work is carried up as high as the young men can conveniently work ; it is then torn down and the bricks cleaned to be used again. Before an exercise is commenced, the instructors show how it should be done. The young men are then required to practice under the constant supervision of the instructors until they can do the work well.

Equal facilities are afforded for learning the other trades taught in this school, and equal thoroughness characterizes the instruction given

SCHOOL OF THE PHILADELPHIA BUILDERS' EXCHANGE.

This school is an illustration of what may be accomplished by associations in the way of establishing apprentice schools. It gives practical and theoretical instruction in carpentry, bricklaying, plastering, stone-cutting, blacksmith work, painting and plumbing. The institution puts forth the following explanatory prospectus :

“ With a view to extend to American youth the field of useful employment, the Master Builders' Exchange have decided to establish a mechanical trade school in the city of Philadelphia, where American boys may be instructed in the rudiments of a trade, to be followed by a term of practice with an employer in actual work.

“ It is proposed to first start evening classes, and, if there are a sufficient number of applicants to warrant the committee in so doing, day classes will afterwards be formed. Instruction will be given on three evenings per week for each class. Two of the evenings will be for shop practice, and the remaining evening for scientific instruction, drawing, etc.

“ At the termination of the course of instruction the pupils will be examined by the committee of each trade as to their manual skill and scientific knowledge, and certificates will be issued to those who are entitled to receive them. These certificates will be found valuable in seeking for work, and entitle the holder to a reduction of one year from his term of apprenticeship.

“ The Philadelphia Trade Schools are not intended to be either a money-making or a charitable institution. The fee to be charged is to cover the actual expenses.

"The Philadelphia Trade Schools are conducted on the principle of teaching thoroughly how work should be done, and leaving the quickness which is required of a first-class mechanic to be acquired at real work after leaving the schools. The instruction is both manual and scientific. A trade is taught in all its branches, and the reason why one method is right and another which seems to produce the same result is wrong is carefully explained. Progress at a trade school is necessarily rapid. Skilled mechanics are employed as teachers, whose duty it is to show how work should be done, and to see that each individual does it properly. It is constantly sought to ascertain not only what the pupil knows, but in what he is deficient. Such a system can rarely be pursued in a workshop, where each employe is necessarily employed upon the work he can do best."

WILLIAMSON FREE SCHOOL OF MECHANICAL TRADES.

One of the most liberally planned and endowed of institutions of its class is the Williamson Free School of Mechanical Trades, founded by the late Isaiah V. Williamson of Philadelphia, "for the purpose of giving poor and deserving boys a good English education, for training them in the habits of morality, economy and industry, and for teaching them mechanical trades." The school is different in some respects from any trade school previously established. It is designed to take the place, so far as a school can, of the old apprenticeship system.

The school has an equipment ample for its purposes. There are three shop buildings well fitted for the trades taught, those for the wood-working and machine trades being well equipped with power tools. The school is located at Williamson School, Delaware County, Pennsylvania, about sixteen miles from Philadelphia.

Classes are admitted on April 1 in each year. Boys to be admitted must not be under sixteen or over eighteen years of age; they must be of good health and of good moral character, and they must be able to read ordinary text fluently, write a plain hand and work in arithmetic as far as fractions. Some elementary knowledge of geography and United States history is desirable, though not absolutely essential. Other things being equal, preference will be given to boys in the following order: Those born in Philadelphia; those born in Bucks County, Pennsylvania; those born in Montgomery and Delaware Counties, Pennsylvania; those born elsewhere in Pennsylvania; those born in New Jersey; those born elsewhere in the United States.

All boys admitted are bound as indentured apprentices to the trustees for three years. The indenture may, however, be cancelled by the trustees for the pupil's incompetency or bad conduct, or if, in their opinion, the pupil has so advanced in his studies as to make it more advantageous for him to pursue his work elsewhere.

Each boy on entering the school is given a preparatory course of six months in wood-working and mechanical drawing in connection with studies in the school room. At the end of that time he is placed at one of the following three trades (the selection of which is made by the trustees, due regard being given to the inclination and adaptability of the boys to the trade to which they are assigned): Wood-working in its various branches, such as carpentering, pattern-making, cabinetmaking, etc.; building, including bricklaying, tile, range and boiler setting, etc., plastering and stone masonry; machine trade in all its usual details, including practical training in steam and electrical engineering, steam fitting, etc. Each boy takes but one of the trades named, and his instruction in mechanical drawing, which continues during his entire course, tends in the general direction of his trade. The number of applications for admission has greatly exceeded the capacity of the school.

Mr. John M. Shrigley, the president of the Board of Trustees, writes as follows to the Bureau under date of June 14, 1894:

"Our experience leads us to believe that the lowest limit of admission age to a trade school should be sixteen years, and that the course should extend over a sufficiently long time to permit instruction in school branches and drawing, as well as trade work. The graduation age should be such as to enable pupils to be considered sufficiently manly to obtain men's wages in a reasonable time after leaving the school. Our first graduating class left us about two months ago, and the reports received from those employing its members leads us to be well satisfied with our methods.

"Mr. Williamson gave us about \$2,100,000, and we have expended about \$500,000 in land (200 acres), buildings (19), water supply, light plant, shop, school, and other equipment. Our pupils are in families of twenty-four, each having its own matron and cottage, and our present capacity is 168 scholars. This can be greatly enlarged at a small expense for additional cottages, most of the place being now on the basis of 300 pupils."

PRATT INSTITUTE.

This most successful educational institution was founded by Charles Pratt, of Brooklyn, and is situated in that city. It is unique

among the class now being considered and is the result of years of study of schools in this country and abroad by its founder. Mr. Pratt has adopted the manual training school, admitting girls as well as boys, however ; he has established trade schools on the same general lines as Col. Auchmuty's, adding in the same department scientific and technical instruction, with particular regard to industrial uses ; he has added trade schools in some special lines for girls and courses for very comprehensive instruction in domestic science. Besides these, the more important departments, should be mentioned the other departments of music, of commerce, of agriculture, and the classes in library methods, as well as the technical museum, a collection for illustrating the achievements in science and art with special reference to the work in the classes.

The Institute seeks to provide facilities by which persons wishing to engage in educational, artistic, scientific, domestic, commercial, mechanical, or allied pursuits, may lay the foundation of a thorough knowledge, theoretical and practical, or may perfect themselves in those occupations in which they are already engaged.

The Institute is based upon an appreciation of the dignity as well as the value of intelligent handicraft and skilled manual labor. It endeavors to give opportunities for symmetrical and harmonious education ; to establish a system of instruction whereby habits of thrift may be inculcated ; to develop those qualities which produce a spirit of self-reliance ; and to teach that personal character is of greater consequence than material productions. Its purpose is to aid those who are willing to aid themselves. Its classes, workshop, library, reading-room, and museum are for this purpose ; and while tuition fees are required, yet it is the endeavor to make possible, by some means consistent with self-helpfulness and self-respect, the admission of every worthy applicant.

In accordance with these principles, the work of the Institute is prosecuted upon several lines, with four distinct aims in view :

1. Educational, pure and simple : the purpose being the harmonious development of the faculties ; as in the work of the High School.

2. Normal : the ultimate aim being the preparation of the student to become a teacher. Normal training is at present given in the Department of Fine Arts ; the Department of Domestic Science ; the Department of Science and Technology ; and the Department of Kindergartens.

3. Technical : or special training to secure practical skill in the

various branches of industrial and domestic art, the handicrafts, the applied sciences, and the mechanical trades.

4. Supplementary and special: intended for the benefit of those who wish to supplement the training of school or college by attention to special subjects conducing to more intelligent direction of domestic, financial, social, or philanthropical interests.

The Institute is provided with a liberal endowment, which enables it to make merely nominal charges for tuition, and, at the same time, to secure the best talent and facilities for the accomplishment of its aim and purpose. All receipts from tuition and other sources are used for the maintenance and advancement of its work.

The following is from an article printed in the Pratt Institute Monthly, a periodical published under the auspices of the school:

"The first exercises in all the trade courses simply serve to introduce the principal tools, and represent in themselves nothing of practical utility; but upon these, as a basis, the classes advance to practical constructive work. In the carpenter shop model houses are built, which bring in all the details of practical house-building; in the machine work, drills, taps and cutters are made, and various machines, such as lathes, engines and electric motors are constructed; and in plumbing, complete connections for sinks and boilers are erected.

"Study of the materials used and of the principles underlying practical methods and rules, is made a prominent feature in these classes.

"In the plumbing class this instruction is given by means of talks and recitations on each Wednesday evening of the course. These talks constitute a thorough analysis of the practice of plumbing, and their substance is written down by the students in note-books arranged in the form of question and answer. An encouraging sign of the times is the fact that the Journeyman Plumbers' Association of Brooklyn has entered into co-operation with the Institute in the direction of the last mentioned class, and lends the benefit of its advice as to the methods employed. At the end of the present year a committee of the Association will examine the members who have passed through the two years' course, both in regard to manual skill and knowledge of practical details, and will award certificates to those showing satisfactory proficiency, which certificates will be accepted in place of the examination of like character now held for admission to the Association. This is the first instance in

this country, as far as is known, of a labor organization entering into active co-operation with the trade school movement, and certainly speaks well for the progressive attitude of the Brooklyn plumbers.

"In the fresco classes of the department, a strong endeavor is being made to afford a training comparable to that of the Industrial Art Schools of Europe. The purpose is not only to supply instruction in the technical practice of the trade, but to provide a course for the thorough study of fresco-design. In order to accomplish this a course of three years has been planned, the first of which is devoted to practice in the technical operations of the trade. In the second year, however, this technical side is left behind, and considerable time is spent upon practice in drawing from the flat and from the cast. This is followed by painting from the cast, and later by copying details from historic ornament and finishing in various methods of color. The third year is devoted to the study of composition of ornament and to the production of finished designs for friezes, panels and ceilings.

"In carpentry and machine work, day classes are carried on as well as in the evening. The day classes are designed for beginners and provide an amount of continuous practice, which allows a thorough knowledge of tools and processes to be obtained, as well as a very considerable degree of skill. The evening classes, while admitting beginners, aim principally to broaden and perfect the training of those already engaged at the trades. The applicants for the day classes have come from almost every section of the country, and the uniform success in active work of those who have satisfactorily completed the courses certainly speaks well for the value of the trade school training."

The Catalogue of the Institute for 1892-3 shows the following registration of pupils in the various departments :

DEPARTMENT.	Day.	Evening.	Total.
High school,	144	....	144
Department of industrial and fine arts, .	559	333	892
Department of domestic art and science, .	1,388	552	1,940
Department of science and technology, .	80	232	312
Department of music,	89	244	333
Department of commerce,	133	293	426
Library classes,	43	....	43
	2,436	1,654	4,090
In more than one department, . . . .	....	....	149
Total individuals enrolled, . . . . .	....	....	3,941

DREXEL INSTITUTE.

The Drexel Institute of Art, Science and Industry, at Philadelphia, is a new school of complex character. The school was opened in September, 1892. As now organized its work comprehends six departments, viz., department of mechanic arts; business department, including a commercial course and a course in stenography and typewriting; technical department, including cookery courses and trade courses in dressmaking and millinery; normal department, including courses for training of teachers in drawing, science, physical culture, manual training, cookery, dressmaking and millinery, and the course in library work; scientific department for advanced scientific training in physics and chemistry, and applications; and art department, including a regular art course, a normal art course, a course in mechanical and architectural drawing, and courses in applied design, decorative painting, wood carving, and stained-glass work. Several additional courses are to be added, among the more important of which will be courses in electrical engineering, mechanical engineering, and machine construction.

The building with its equipment has thus far cost about \$1,000,000. The endowment is \$1,000,000, which is dedicated to the maintenance of the institution. The institute possesses a valuable library of about 10,000 volumes, and a museum devoted to art industrial productions, such as textiles, ceramics, wood carvings, metal work, ivories, embroideries, etc. The whole is the gift of Mr. Drexel of Philadelphia.

The teaching force now numbers over forty, with President James MacAlister at the head. The work of the next year will require an increase in the number of instructors.

The instruction in the department of mechanic arts is of the advanced manual training character. It aims to give a general rather than a special training. The work provides a thorough course in mathematics, science, drawing, and shop work in connection with the essential English branches of a secondary education. The time of the student is about equally divided between the class room and laboratory studies, and the shop work. The course of instruction covers three years of two terms each. The tuition is \$20 per term.

ARMOUR INSTITUTE.

The Armour Institute has been organized on the plan of a series of trade and advanced technical schools. It will do for Chicago a work similar to that done by the Pratt Institute in Brooklyn and the Drexel Institute in Philadelphia, but still broader and more diversified.

The carrying out of the full idea, including the new building for the manual training and practical classes, recently completed, will involve an expenditure by Mr. Armour of about \$3,000,000, including the large amount of productive property surrounding the institution which Mr. Armour has given for purposes of perpetual endowment.

Armour Institute is organized into departments, each of which is in the charge of a director. The departments already organized are as follows: The department of mechanical engineering; the department of electricity and electrical engineering; the department of mining engineering and metallurgy; the department of domestic arts; the department of library science; the department of art; the department of kindergartens; the department of commerce.

Besides the equipment of the several scientific departments the institute has a gymnasium, a technical museum, and a library. The home of Armour Institute is a fire-proof building of the most modern construction, five stories in height above the basement, and furnished with every convenience that health, comfort, and the requirements of such an enterprise could dictate.

This institution is founded for the purpose of giving to young men and women the opportunity of securing a liberal education. It

is hoped that its benefits may reach all classes. Its aim is broadly philanthropic. Armour Institute is not a free school ; but its charges for instruction are in harmony with the spirit which animates alike the founder, the trustees, and the faculty, namely, the desire to help those who wish to help themselves.

R. HOE & CO'S SCHOOL.

R. Hoe & Co., printing press builders, of New York City, for thirty years have conducted a school for the benefit of their apprentices. In answer to an inquiry from this Bureau the following letter was received from the firm :

"The school we have connected with our works is for the special use of the apprentices in our establishment (of which there are from two hundred to two hundred and fifty). The school is an evening school ; the session being from 6.30 to 8.00 every night in the week excepting Saturday and Sunday. The term begins about the 1st of October and ends about the 31st of May.

"The boys enter our establishment at the age of sixteen and serve a five years apprenticeship. Their attendance at the school is part of the agreement made with them on entering their apprenticeship. During the first year they are not required to attend the school, but for the remaining four years each boy is expected to attend the school three nights each week. They are divided into classes, and at the expiration of the day's work (at 6 o'clock) those who are to attend the school are given a light supper, at the expense of the firm, before going to the schoolroom.

"There are three regular teachers, besides special instructors in drawing, and at stated intervals during the term lectures are given on interesting and instructive subjects, by competent lecturers. The branches taught are mechanical drawing and mathematics, including arithmetic, geometry and trigonometry ; the two latter subjects of course being taken only by those whose previous education permits. Instruction is also given in writing on Friday evenings.

"During the first year of attendance at the school (which is the second year of apprenticeship) the boys receive instruction in mathematics only. During the second and third year each boy devotes two evenings a week to mathematics and one to drawing, and during the fourth year two evenings a week to drawing and one to mathematics.

"There is also an extensive circulating library in connection with the school, for the exclusive use of the pupils.

"The attendance averages over ninety (90) per cent. and no boy is allowed to remain away without an acceptable excuse from parent or guardian, in writing. Examinations are held at regular intervals, to test the efficiency of the pupils.

"The entire expense of the school is borne by the firm, the only outlay required of the apprentices being for their drawing instruments, etc., amounting to about five or six dollars in all.

"Although the expense of this school to the firm is considerable, we have found it a great advantage to the boys themselves, and eventually to the firm, the apprentices being taught to think in connection with their duties in the works. The result is that they turn out much more intelligent and reliable workmen, and they all understand that they have the prospect, if they show themselves capable and worthy of it, of bettering their position and of becoming foremen in our establishment."

IN EUROPEAN COUNTRIES.

Trade and technical training is in its infancy in the United States. When we desire to study the methods of schools devoted to this class of education, and look for light as to the advantages they confer, we must turn to Europe. The formative period has long since passed there, the schools are now firmly established and their necessity is no longer debatable. No feature in the educational systems of France, Germany or Switzerland is more noteworthy or prominent than the attention given to industrial training. Much of the supremacy of France and the superiority of its artistic manufactures is due to technical schools, some of which have had an existence of fifty years. The awakening in Germany has been more recent, but the progress has been greater, and that nation now stands pre-eminent in the work of technical education. The recent great progress in industrial art there, is an evidence of the wisdom of this course, and the quality of the mechanics that Germany has sent to this country bears evidence of the value of the education they received. Switzerland, a land-locked republic, owes its proud supremacy among manufacturing nations to its trade schools. Without them, the advantages possessed by other nations would have speedily relegated this small nation to the background of obscurity. The United States Bureau of Labor recently instituted

an inquiry as to the economic results of trade schools in European countries. The responses were not as general as were hoped for, as in many instances the data had not been collected or preserved, but the following tables, stating the facts, in relation to over 2,600 students in various countries, will serve as an index to results accomplished :

SUMMARY OF THE ECONOMIC RESULTS OF TRADE SCHOOLS
BY COUNTRIES.

COUNTRY.	STUDENT WORKMAN SUPERIOR TO ORDINARY WORKMAN IN—											
	Use of Tools at Beginning of his Employment.			Increasing His Skill in Use of Tools.			Economy in Use of Materials.			Planning and Arranging Work.		
	Yes.	No.	Not Reported.	Yes.	No.	Not Reported.	Yes.	No.	Not Reported.	Yes.	No.	Not Reported.
Austria, .	237	82	1	238	77	5	208	110	2	234	86	..
Belgium, .	798	11	3	792	15	5	757	52	3	746	55	11
Denmark, .	119	2	..	115	6	..	87	18	16	117	3	1
France, .	282	50	..	285	40	7	196	45	91	295	31	6
Germany, .	623	19	..	520	28	94	464	132	46	618	16	8
Great Britain,	112	14	..	113	12	1	71	15	40	115	10	1
Norway, .	96	6	1	100	1	2	43	50	10	101	2	..
Russia, .	120	96	..	117	89	10	99	114	3	142	68	5
Sweden, .	164	21	..	158	18	9	97	63	25	168	15	2
Switzerland,	54	3	..	48	0	..	34	13	10	51	5	1
Total, .	2,605	304	5	2,486	295	133	2,056	612	246	2,587	292	35

SUMMARY OF THE ECONOMIC RESULTS OF TRADE SCHOOLS
BY COUNTRIES.—CONTINUED.

COUNTRY.	STUDENT WORKMAN SUPERIOR TO ORDINARY WORKMAN IN												
	Promise of More Intelli- gent Work.			Moral Qualities.			Management of Men.			Interest in Employer's Welfare.			
	Yes.	No.	Not Reported.	Yes.	No.	Not Reported.	Yes.	No.	Not Reported.	Yes.	No.	Not Reported.	
Austria, .	241	78	1	94	15	211	26	..	294	..	242	78	..
Belgium, .	771	34	7	726	80	8	257	81	474	..	749	60	3
Denmark, .	116	5	..	83	41	17	21	7	93	..	95	23	3
France, .	302	25	5	260	63	9	42	10	278	2	222	92	18
Germany, .	636	4	2	19	..	623	58	21	561	2	578	55	9
Great Britain,	117	7	2	94	13	19	26	3	37	60	75	16	35
Norway, .	95	2	6	46	37	20	10	2	73	18	62	38	3
Russia, .	184	29	3	181	33	2	28	30	96	62	69	128	19
Sweden, .	161	24	..	83	80	33	25	8	145	12	130	45	10
Switzerland,	48	3	0	43	9	5	18	8	26	10	39	9	9
Total, .	2,671	211	32	1,609	800	945	511	160	2,077	166	2,261	544	109

In order to provide technical education hundreds of schools are already established in Europe, and the indications are; so popular are these institutions, that many more will soon be in existence. The experience of the older countries has in it a moral and a lesson for us, and one that should be carefully studied. With this end in view the following facts in relation to European schools are appended. Nothing like a complete summary has been attempted, the sole object being to furnish information relative to the objects and methods by outlining the plan of teaching and the results attained in a few representative schools in each country. The information was gleaned principally from the Eighth Annual Report of the National Commissioner of Labor, to whom a general credit is given, from consular reports, principally Nos. 157 and 167, and from other and minor sources.

IN AUSTRIA.

On leaving a primary school in Austria a boy who wishes to receive a technical education will go to the Realschule for a three years' course. At the age of thirteen he may enter a technical school for four or eight years, respectively, and there qualify for engineering, manufacturing, or any distinctive branch of technical industry he may see fit. The special privilege of serving only one year in the army is granted to the successful student of the technical schools, as well as to those of the high schools.

The "Gewerbe" schools are the purely technical schools of the country. In these, instruction is given in various branches of trade, and especially in such branches as may form a distinct specialty of the district in which they are located. In these schools the pupils are scientifically prepared for their pursuits in life far more effectively than if an apprenticeship had been served in some manufactory or ordinary workshop. Every hour spent in the school is devoted to the acquisition of knowledge under the eyes of a duly recognized master of his art, and no time is given to the gain of profit for a master in his trade. Whatever the art in which the pupil is receiving instruction, whether in metal work, in carving, or in modeling, sculpture, drawing, engineering, architecture, building, joinery, or whatever it may be, nothing is wanting to insure the pupil a full knowledge of the why and the wherefore of what he is doing and the best mode of doing it. The productions of the pupils are not finished in order to be sold, but are regarded as the evidence of the process through which the pupils have passed to become masters of their business in the branch of technical industry they have studied.

On completing their education in these schools, the pupils are never at a loss for employment. Their services, indeed, are often secured before their term expires. Men of business find that they are far better qualified for positions of trust, skill and capacity than the general order of men obtained in the usual way. In many instances they are the sons of merchants or of manufacturers, who place them in these schools to qualify them for taking prominent positions in their own houses. No pupil is admitted into the school until he has completed his thirteenth year. He may enter for a term of two years of four half-yearly courses or of four years of eight half-yearly courses. Pupils whose examination proves satisfactory are eligible from any school on the production of the usual

certificates. In the artists' department the term is three years ; for artisans the full term of four years must be taken. The tuition fee varies in different provinces, ranging from six to ten florins a year.

A visit paid to the technical high schools is very interesting. Everywhere the earnest study of the work in hand is visible. Nothing appears to be undertaken because it is amusing or as a means to kill time. The very best work that can be produced and presented to the masters for approval is the aim steadfastly pursued. The qualifications of the professors for their work are manifest, as they closely examine and critically review the pupils' work ; and it is noticeable how completely they possess the confidence and respect of their pupils.

The subjects are so comprehensively taught that the pupils completing the term are fully capable of entering at once into general practice in technical building or in the construction of machinery. They are qualified to pass the master-builders' examination, as it is required by the school authorities that they shall be actively employed in building work during their holidays. Under the guidance of the professors they inspect new buildings, thus gaining practical knowledge that renders their services of great value ; and they are gladly taken into private architects' and builders' offices.

Schools for the building trades, etc., may be found everywhere, while schools for special trades are located in certain isolated spots where it is deemed necessary by the government to create or foster home industries.

All recognized trades and branches thereof are represented by schools, for example, of the art trades, building trades, machine industry, chemical industry, textile industry, lace making, every species of wood working, stone and marble cutting, willow working, pottery, brass working, glass industry, gunsmithing, locksmithing, watchmaking, iron and steel industry, musical instrument making, of jewel manufacturing, and of leather working.

In the city of Prague alone, as an illustration of the extent and diversity of these schools, there were in 1888, 3,001 pupils in attendance, classified as follows :

INDUSTRIAL SCHOOLS OF THE CITY OF PRAGUE.

SCHOOL.	Teachers.	Pupils.	SCHOOL.	Teachers.	Pupils.
Bakers,	2	97	Merchants,	7	237
Barbers,	8	107	Shoemakers,	8	365
Bookbinders,	8	155	Tailors,	5	221
Butchers,	2	90	Typographers,	6	141
Carpenters,	1	57	Varnishers,	5	111
Confectioners,	1	45	Waiters,	2	63
Coopers,	1	35	Other Trades,	1	63
Glovers,	4	159	Preparatory School,	8	185
Goldsmiths,	12	539	Continuation School,	9	267
Locksmiths,	1	55	Total,	76	3,001

In one of the schools in Vienna there are 599 pupils, and the appended table shows to what extent the various trades are represented by the pupils:

PUPILS.	Number.	PUPILS.	Number.
Machine Smiths and Fitters,	165	Model Pointer, . . .	1
Machine Attendants, . .	9	Bookbinders, . . .	6
Engine Drivers, . . .	9	Potter,	1
Tin Workers,	14	Fancy Leather Worker, .	1
Iron and Metal Workers, .	26	Turner,	1
Stokers,	5	Watchmaker,	1
Mechanics,	18	Miller,	1
Building and Art Locksmiths	56	Merchants,	2
Joiners,	115	Railway Superintendent, .	1
Pattern Maker,	1	Founders,	6
Sculptors and Modelers, .	34	Saddlers,	3
Carpenters,	16	White Embroiderer, . .	1
Bricklayers,	21	Illuminator,	1
Lithographers,	2	Wheelwrights,	2
Decorators,	8	Japanner,	1
Upholsterers,	5	Tailor,	1
Metal Chasers,	4	Shoemaker,	1
Gilders,	2	Stone Masons,	6
Goldsmiths,	4	Draftsmen,	6
Engraver,	1	Foremen of Decorators, .	10
House Painters,	2	Smiths,	7
Installateurs,	3	Factory Foremen, . . .	3
Bronze Worker,	1	Unknown,	10
Gun Makers,	3	Total,	599

IN FRANCE.

In France the evolution of the trade and technical school has been very rapid of late. Manual training in the public schools is taught with a view to supplement it by technical education later on, and many private schools and colleges, calculated to teach trades and impart technical knowledge, have recently been established.

There is a class of institutions in France known as manual apprenticeship schools. They are a kind of public elementary trade school. In point of general instruction they are of the same grade as the advanced primary schools, but less attention is paid to purely intellectual than to workshop training. The latter is usually made to conform in character to the industrial needs of the region.

Previous to 1880 public technical training lacked completely in organization. Certain municipalities, like Paris, Havre, and Reims, alive to the importance of this branch of education, had founded apprenticeship schools or annexed technical courses to their advanced primary institutions. In other cases private or industrial associations had done the same thing.

The law of December 11, 1880, assimilated all these institutions and brought them under the joint control of the minister of public instruction and the minister of commerce and industry. It afforded also an opportunity for departments or municipalities wishing to provide the proper workshops and pay the necessary instructors to change the character of their advanced primary schools to apprenticeship schools; in other words, to pass from a system of purely intellectual instruction, or mental with a modicum of manual training, to an elementary trade education, preparing the student for the exercise of some manual occupation.

THESE SCHOOLS IN PARIS.

This class of institutions, as has been already remarked, represents strictly neither manual training nor trade schools, though leaning somewhat toward the latter.

In Paris there are four principal ones for boys and six for girls, supported by the municipality, and administered largely by a supervising board appointed by the municipal council and the ministers of public instruction and of commerce and industry.

These schools pursue distinctly the aim of shortening the period of apprenticeship by allowing the pupil to choose, either upon entering or at the end of the first year, the specific occupation he expects to pursue in after life. In the boys' schools the period allowed for general instruction is four hours in the first two, and three hours in the third year daily; in the girls' schools three hours daily. The boys spend four hours and a half daily in the workshops during the first two years and six hours and a half during the third; the girls five hours daily in all the years.

The general instruction covers the most necessary subjects prescribed in the advanced primary schools. For the boys it comprises the French language and literature, mathematics, applied mechanics, technology, physics, chemistry, history, geography, ornamental and mechanical drawing, and bookkeeping; for the girls, ethical and civic training, French language and literature, arithmetic, science in

its application to commerce and industry, history and geography, ornamental and free-hand drawing, and bookkeeping.

In the workshops the following trades are learned : Boys—forging, metal turning, fitting, tool making, manufacture of instruments of precision, ornamental locksmithing, modelling, carpentry and joinery, wood turning ; girls—embroidering for dresses or furniture, dressmaking, millinery, making underclothes and other articles of linen, industrial drawing.

Generally speaking, such schools are of the same grade as the advanced primary schools. The pupils are from twelve to thirteen years of age upon entering, and must have already finished the course in some elementary primary school.

The admirable and practical system, understood to be the creation of M. Alfred Deutsch, adopted in two of the girls' schools, can be readily understood from the following illustration : A young girl, selected from a section of eight or ten, was shown a fashion plate of costumes and told to sketch one on a blackboard from memory, at the same time adapting it to a very stout girl who was chosen as the person for whom the costume was to be made. This she did, referring only twice to the fashion plate for an instant. Then the measure was taken, and the cutting and basting done by the rest of the section. In twenty minutes' time a costume was completed, which was an exact reproduction of that sketched upon the blackboard.

Municipal trade instruction in Paris is being constantly extended to new industries. There already exist four manual apprenticeship schools for boys: Diderot School for work in metal and wood ; School of Industrial Physics and Chemistry ; Trade School for Furniture Making ; Trade School for the Book Industries. Two more schools, the Crozatier School for Bronze Industries and the School for the Building Trade, will soon be opened.

For female education six industrial and housekeeping schools exist where girls can learn a trade. Two other schools of the same nature will soon be opened.

The studies and apprenticeship training are gratuitous. The pupils who follow the complete course (three or four years) receive a certificate of apprenticeship. The pupils standing best receive prizes of from 50 to 300 francs (\$9.65 to \$57.90).

THE DIDEROT SCHOOL AT PARIS.

The Diderot School was opened in January, 1873, as a municipal

institution. The aim of the school is to form workmen who are intelligent and proficient in all the details of their trade.

Workmen are instructed in the following occupations, comprising metal and wood work : Forging, metal turning, fitting, locksmithing, machines of precision, patternmaking, carpentry, and wood turning.

The duration of an apprenticeship is three years. During the first year pupils pass successively the workshops for wood and those for iron, with a view of finding out their special aptitude. During the last two years they remain in the trade which they have chosen with the consent of their parents and according to the vacancies that exist. Following is the programme of studies.

MANUAL WORK.

First year. Pupils pass successively through all the different workshops for wood and iron.

FORGE WORK.

Second year. Preliminary exercises, tools, welding.

Third year. Forging parts of machines.

METAL TURNING.

Second year. Making tools, fittings, turning simple pieces, drilling, and boring.

Third year. Adjusting joints and sockets, screw cutting, screw cutting by hand.

SMALL MECHANICS.

Second year. Tools. Fitting and turning small pieces.

Third year. Small machines, models for demonstration.

ARTISTIC LOCKSMITHING.

Second year. Tools, keys, locks, architectural iron work.

Third year. Joining pieces, ornaments, leaves, artistic iron work.

PRECISION.

Second year. Preliminary exercises, tools, screw cutting by hand.

Third year. Physical and telegraphic apparatus.

PATTERNMAKING.

Second year. Patterns for simple parts of machines.

Third year. Machine tools, gearing, loam boards for foundries, core boxes.

CARPENTRY.

Second year. Fitting tools, joining, various frames.

Third year. Doors, sashes, furniture mountings.

WOOD TURNING.

Second year. Mounting and fitting tools, handles and simple pieces, screw cutting by hand.

Third year. Turning patterns for foundries, twisted pieces and mountings.

The class instruction comprises grammar, orthography and composition in the French language, arithmetic, geometry, industrial chemistry, metallurgy, physics, technology, mechanics, history of France, geography, free-hand drawing, drawing from models in clay, iron, and wood, mechanical drawing, and, during the last year, bookkeeping.

The day's work comprises four hours and a half in the workshops for the first two years, six hours and a half for the third; four hours of class instruction for the first two years, three hours for the third.

The school is in session from 7.30 A. M., for pupils of the first and second years, and from 6.45 A. M., for pupils of the third year, until 6 P. M., with an intermission for luncheon.

Instruction is free; the pupils are furnished gratuitously with all the objects necessary for their studies and manual work. None are admitted under thirteen or over sixteen years of age. Sometimes pupils having a certificate of graduation from elementary primary schools are admitted at the age of twelve years. Candidates are received after having passed an examination at the school consisting of a dictation; a problem of arithmetic, whole numbers; a problem in fractions; a problem on measurements of surfaces or volumes applying the metric system; a free-hand sketch.

INDUSTRIAL SCHOOLS FOR GIRLS IN PARIS.

There are six of these industrial schools maintained by the city of Paris. Four of them were founded by the city. The other two had been private institutions, but became city property, one in 1884, the other in 1886.

The object of these schools is to teach young women certain trades which pertain to their sex, and at the same time to instruct them in the duties of housewives.

The programmes and distribution of classes are, in general, the same in all the schools, so that the information for one will nearly apply to all.

The course of instruction is divided into two divisions—the general course, in which all must take part regardless of their trades, and the special courses comprising the following trades: Plain sewing and finishing, linen needlework, washing and ironing, embroidery—white and colored, artificial flowers and millinery, corset making, underwear making, fashionable dressmaking.

The general course comprises: Primary instruction (advanced), elements of bookkeeping, linear drawing, cutting and finishing, gymnastics, one foreign language (English), domestic economy and practical instruction in kitchen and housework.

Pupils must remain at the school from 8:30 A. M. until 5:30 P. M. They are not permitted to leave for the noonday meal, but a luncheon prepared by themselves is furnished free of charge.

PURELY INDUSTRIAL EDUCATION.

In the general system of public primary education in France there are four classes, viz.: The infant schools, the elementary primary schools, the advanced primary schools and the manual apprenticeship schools. In the first three classes the manual work is educative, pure and simple, and any industrial value which it may have is general and remote, rather than special and immediate. In the last class—manual apprenticeship schools—the training begins to assume a purely industrial character. It is designedly elementary trade training. Schools of this class, as has been indicated, are founded by departments and municipalities, and their operation is determined by the law of December 11, 1880.

With the exception of the class of schools last mentioned, education of a purely industrial character does not possess in France any general organization, nor are the institutions in which it is given subject to any special obligation. These institutions may be divided into three grades—primary, secondary and superior.

Primary education of an industrial character is given in three different classes of schools—the national manual apprenticeship schools at Armentieres, Vierzon and Voiron, and the national school for watchmaking at Cluses; the manual apprenticeship schools previously referred to as a part of the general public school system; and institutions or annexed courses founded by industrial societies, chambers of commerce or private associations.

The national schools are maintained by funds annually voted by the chambers and appropriated in the budgets of the ministers of public instruction and of commerce and industry.

Manual apprenticeship schools are supported in the same way.

The third category—*i. e.*, institutions founded by industrial societies, chambers of commerce or private associations—are maintained at the expense of their founders. They may draw, however, a special subsidy from the minister of commerce and industry. During 1890 eighty-seven institutions and annexed courses of this character received from this source subsidies amounting to \$49,624.49.

IN BELGIUM.

By an agreement made in 1889 the ministry of public instruction in Belgium controls all theoretical teaching of hygiene and domestic economy in the primary and night schools, all manual training and needlework classes and certain normal courses and object lessons. The ministry of agriculture, industry and public works supervises technical and trade schools, organizes the housekeeping schools proper and all trade and domestic training classes in the public schools. In addition, it has for years carried on the great work of developing, subsidizing and inspecting the large drawing schools, industrial schools, apprentice and agricultural schools.

To this ministry of agriculture, industry and public works belongs the duty of inspecting workshops and enforcing factory laws. Being thus intimately connected with the industries of the kingdom and brought into contact with its industrial needs by an easy transition, the oversight of technical and industrial education in all its phases was confided to this ministry, and a complete service of inspection was established, both of industry and of trade instruction. Since 1891 the organization and inspection of all the housekeeping schools grafted on the public school system, as well as of independent institutions for domestic training and trade instruction, have been turned over to the same department, and the official force of inspectors includes both women and men.

The fact that the State organizes and aids public instruction, that there is one enlightened head, one policy, one system of inspection with a very high standard, instead of many independent superintendents with different policies, conduces not a little to the excellence and practical utility of industrial teaching in this progressive nation. At the same time full play is afforded for private

munificence, initiative and experiment. Every man's system is given a fair trial, his pet ideas free scope. The government merely strengthens where private hands are weak, guides where they are inexperienced, supplies omissions and supervises firmly but not offensively.

Special, industrial and technical instruction in Belgium may be classified as follows :

1. Apprenticeship schools and *ouvroirs*, or workshop and school combined. These were established as charities, and are diminishing in number and importance.

2. Agricultural and horticultural schools, and schools for training dairy maids.

3. Girls' housekeeping schools, rapidly developing, over 250 having already been established.

4. Trade schools for girls, of which all the principal cities now boast one or more.

5. Parochial trade schools, those of Saint Luke being the highest type.

6. Trade schools supported by guilds and trade unions, such as the brewers' and tailors' schools.

7. Trade schools having day classes and shop work. Their design is to fit for a trade and to do away with the often misdirected drudgery of apprenticeship.

8. Large industrial schools, sometimes combined with drawing schools, sometimes separate, where classes are held in the evenings and on Sundays, and where the course is widely eclectic.

9. Drawing schools, existing in every town of any size in the kingdom.

10. Commercial schools, the most important of which is at Antwerp, with the object to prepare accountants, merchants, consular and commercial agents for home and consular service.

11. Schools of industry and mines, highly scientific in character.

WHAT THE SCHOOLS ENDEAVOR TO DO.

The aim of technical and industrial schools in Belgium is trade proficiency rather than all-around education. They are designed to train the artisan rather than to develop the man. Apprentices, workingmen and would-be workers awaiting employment attend these industrial courses to increase their own technical efficiency in the trades they are already following or mean to adopt, and also with the hope of improving their chance of obtaining better occu-

pation at those pursuits in a labor market seriously overcrowded. Although joint instruction, mental and manual, is generally provided, the mental is usually sacrificed, or at least subordinated, to the manual; and it is intended not so much to add to the pupil's sum of knowledge in all lines as to aid and develop his capacity in his present or future calling. Considered as mere trade schools, it is their strong point that time is not lost in acquiring facts which have no bearing on the life work. Considered as educational factors, however, these great industrial institutions are sometimes called narrow and one-sided. In their favor the fact should be emphasized that a great variety of teaching in all branches is offered, courses as purely theoretical and scientific as American colleges afford. The workingman or student in any walk of life who chooses to attend night school during six, eight, even ten years—and some men study twelve and fifteen years—gets a very comprehensive literary and scientific as well as industrial course. Degrees are given, however, after three and four years for proficiency in any one branch or course, and the majority of pupils frequent the school no longer after winning the certificate they set out to gain. A great many young men, many men of mature years, indeed, take course after course and degree after degree after having succeeded in mastering the branch which will best serve in their chosen occupation or life work—an occupation seldom changed in the stable and conservative social order and traditions which distinguish the Belgian people.

A remarkable feature of Belgian industrial education and worthy of all emulation is that many firms and industrial establishments, impressed with the need of having better trained workmen, and actuated by motives of genuine philanthropy, create and support technical and special schools.

The economy with which the technical and industrial schools are administered in Belgium is remarkable. Considering their equipment, the excellent qualifications of the men who compose their faculties, the practical utility of their teaching and the results achieved, the Belgian schools are perhaps the cheapest in existence. The power of organization and administration is conspicuous; the sense of personal responsibility for the use of trust funds is very high; and the interest in education is both unselfish and widespread. More than all, greed for gain is not a ruling spirit. Men realize that there is something better to strive for than mere money getting; and foremost citizens lend their talents and efforts to the cause of

education. As a proof of the admirable character of the promoters and directors of these institutions, the fact may be cited that, in almost every city, the alderman of public instruction or the mayor, who chiefly controls the schools, is either a university professor or a member of the national chamber of deputies or a professional specialist, in every case familiar with public needs and vowed to the public service, whether he be a renowned artist or a distinguished engineer.

TRADE SCHOOLS FOR GIRLS.

In this branch of trade and industrial education, Belgium is especially in a leading position. In 1868, the city of Brussels took the management of a girls' trade school, hitherto a private enterprise, and put the institution on a firm basis. Since then such schools have grown rapidly all over the kingdom and their popularity and success is ample evidence of the wisdom and forethought that created them. When these trade classes were first established they were often opposed. In the dressmaking trade, for instance, employers wanted apprentices that would drudge, run errands or fashion one portion of a garment all their lives. They objected to applicants who claimed to be able to make all parts of a garment, and who expected higher pay in consequence. The more enlightened women of the profession, however, lend all their influence to the trade school. Through the efforts of two of the leading dressmakers of Brussels, artists in their profession, who serve on the jury of award, drawing was made obligatory in the trade school, rue du Marais. In first-class establishments, they insisted, the workwomen first see the client, then sketch a design that suits her, draw the costume, and calculate by measurement the amount and cost of material, thus securing appropriateness and economy. Again, the fashionable dressmakers of Brussels furnish the school with new patterns as styles change. Their testimony is that girls who are graduated from the institution are more valuable, after some shop training, than workers not educated there, and that they often become forewomen and heads of departments. Indeed, the pupil, after getting a few years' practical experience in the work room, threatens to supersede the old line dressmaker entirely, since she knows more theory; she can design, she can create. On the other hand, girls leaving the school after three years' training sometimes assume to possess knowledge which only current practice can give. They have the theory of ordinary garments only, not of the higher

creations of the dressmakers' art—artistic toilettes such as the luxury of the present day demands.

IN THE NETHERLANDS.

It is significant of the high rating which in the Netherlands is accorded to technical training that schools in various localities are jealous of the right to be known and described as technical schools. It follows that the phrase "technical training" is here given a different definition, according as the authority questioned chances to be identified with a trade, marine, agricultural, or sewing school.

In the year 1869 a small number of public-spirited men in Rotterdam associated themselves for the organization and maintenance of a city trade school. The articles of association were approved by royal decree on October 1, 1869, and the school work began. The aim of the society was succinctly stated in the first paragraph of its articles of incorporation thus: "The purpose of this association is to train able mechanics." From the beginning the work of the school met popular and official approval, which has steadily augmented. At first the members of the city council, in common with other interested citizens, contributed as individuals to its maintenance. Now the city council officially evinces its approval by voting a generous annual subsidy. At present the work is further subsidized by the provincial states of southern Holland, and also by the department of the interior of the Netherlands Government.

The trade school course is of three years' duration. An applicant for admission must be not less than twelve and not more than fifteen years of age. He must prove by examination his ability to read and write well. He must have knowledge of the general rules of arithmetic and of ordinary and decimal fractions.

Theoretical training occupies the morning hours—from 8 to 12 o'clock—and includes instruction in Dutch grammar, arithmetic, drawing, geography, mathematics, and writing. The hours for practical training in workshops connected with the school are from 2 to 7 P. M. in the summer and from 2 to 5.30 P. M. in the winter months.

It is here to be stated that, while the theoretical instruction, as shown in the paragraph preceding, is a continuation of the teaching of the lower-grade public schools, whence the pupils have come, it is yet modified in all ways possible to accord with the fact that the

boys are to become mechanics. Examples and illustrations—not abstract, as in average school text-books, but drawn from the vocation which is to engage the boy's adult years—are employed in theoretical class exercise. Especial attention is given to drawing. Beginning with the making of rectilinear lines and curves, the boys are speedily advanced to the simpler details of construction, and to measured drawings from models and from actual work. In the senior class pupils are taught mechanical projection and perspective as applied to architectural details.

Upon completion of his three years' course of study, deportment and class standing having been good, the boy is discharged with a certificate which has the practical value, so favorable is the reputation of the school, of insuring to him immediate employment. In all trades represented at the school the graduates are sought after by employers, and, as yet, the demand in the Netherlands for graduates of trade schools is in advance of the supply.

The employers agree in testifying that the work of the boy trained three years in the trade school has a higher marketable value than the work of the boy who, deprived of the school privilege, has been compelled through poverty to learn his trade in the shop. One is an all-round mechanic who has learned the "why" of things; the other a drudge, without resource or adaptiveness, whose work is, and always will be, purely perfunctory. It is the rule of the Rotterdam school (and also of most other trade schools of the Netherlands in late years) that all practice work shall be done upon objects of normal size and for actual use.

OPINIONS OF AN AMERICAN CONSUL

Walter C. Gardner, United States Consul at Rotterdam, from whose report the information relative to industrial education among the Dutch is gleaned, prints the following expression of opinion obtained while he was in search of material :

"A unique and entirely European (or class) criticism of some of the Dutch technical schools is made by Dutchmen to the effect that the schools educate too much and too well. 'We seek,' said one school manager, 'to make good wage-earning mechanics who shall be competent to their tasks, but at the same time content to remain permanently in the rank and station of a wage-earning mechanic. Yet we find our pupils ambitious to reach higher, and, by virtue of their excellent training, competent to reach higher.' Growing animated, this man continued: 'Why, one of the boys graduated by us, who should have been satisfied to do good work at

his bench, went to New York a few years ago and I just now hear he has been successful against sharp competition in winning first prize for the best plan of a gigantic railway bridge in the United States.' The teacher concluded: 'It is not for this our trade school boys are trained, and we make a social and an industrial mistake in thus overtraining.'

I doubted, in view of his illustration, whether Americans would wholly agree with him.

Seeking to discover the effect of these mechanic-making schools upon the industrial situation of the Netherlands, I have talked both with the men who employ labor and the men who work for wages. Next to the educators themselves, employers of skilled labor are the most pronounced advocates of trade schools, which do not cheapen, as these men testify, but only improve the grade of skilled labor; making it not merely more profitable to the employer, but more marketable. The old adage that 'there is room at the top' is proved anew in the experience of this country thus far with its trade school graduates."

IN GERMANY.

The Germans thoroughly understand the necessity for schools designed to perfect scholars in trade and industrial arts. They have made manual training a prominent feature in their public schools mainly as a preliminary to the specific education in some particular branch of industry that is to supplement it. The government encourages technical schools, from the trade schools to the higher institutions that prepare young men for a profession. Many schools are maintained by private subscriptions and by manufacturing concerns, and whenever a falling off in the quality or quantity in any industry is noted, inquiry as to the cause is made and schools established to aid in restoring former conditions or producing better returns. Each trade has its separate schools, the different industries are encouraged in a similar manner, and all the manufacturing centers of Germany are to-day fully equipped with school facilities calculated to produce mechanics that will understand their trade in theory and practice. The great industrial advance made by Germany recently is freely admitted to be due to these schools in the main. The industrial competition among the nations of Europe is enormous, and is growing daily. The Germans understand perfectly that the chief factor of the industrial prosperity of a country is the technical education of the future producers, and in order to attain this no sacrifice has been deemed too great.

A SPECIMEN OF GERMAN METHODS.

People ignorant of the German character say that the Germans are theorists ; but, in fact, few, if any, people are more practical. Nations competing with Germans should keep the fable of the hare and tortoise in mind. They copy, buy and take from others ; imitate, arrange, combine and invent ; and, when they do invent, they take out letters patent in every country in which they hope to sell their inventions or see them used.

If an industry languishes, immediately a commission inquires into the causes and recommends remedial measures, among which, usually, is the advice to establish technical or industrial schools devoted to the branch of business under consideration. In late years tanning had been going down in the Empire. France and the United States were fast forging to the front, the latter especially in machinery and methods of good, quick work. To remedy this, a tanning school, the only one in the world, was opened at Freiburg, in the heart of Saxony.

In England, Austria, and France there are schools in which the chemistry needed in tanneries is taught ; but there is no such school as that of Freiburg. Freiburg has a population of 28,000. The school was opened in 1889. Its object is stated in its name. In it one can learn the practical and theoretical preparation, tanning and finishing of leathers. It is supported by the State, which gave it last year 5,000 marks ; by the city, which gave it 1,500 marks ; and by friends, who gave it 2,385 marks (a total of \$2,115). Besides money, presents of hides, rare pieces of leather, barks, nuts, etc., are sent to it ; also, magazines and technical papers.

Its scholars come from all parts of the world. Every year, since 1889, scholars from Prussia, Austria, Roumania, France, Meiningen, Russia, Würtemberg, Holland, Switzerland, Bavaria, Oldenburg, and Saxony, have been in attendance.

For practical work, the school is fitted up from cellar to garret with all kinds of machinery, from the steam engine furnishing power to the finishing machine that turns out the finest patent or calf leather. There are rooms and machines for the raw skins, lime baths, vats, and cutting, rolling, pebbling, stretching, and pressing machines. Every machine in the school was invented in the United States, and the director worked ten years in the tanneries of the United States.

The students give most of their time to studies of use in tanning,

preparing, and finishing leather. They learn about oxygen, alkalies, carbo-hydrates, albumenoids, and fermentation. They study textbooks and hear lectures, but, besides, they work in the tannery and laboratory. The course is inorganic, organic, practical inorganic, and practical tanning chemistry; physics, microscopic demonstrations, mathematics, correspondence, bookkeeping (single and double entry), commerce, banking, drawing, mechanics, instruction as to what to do in cases of accidents, injuries, etc.

MASONS' AND BUILDERS' SCHOOLS.

The masons' and builders' schools, like most of the industrial and industrial-art schools, had their origin in a desire to give young men—carpenters', masons', and builders' apprentices—just such training as would be best suited to help them to understand each piece of new work and to come "out of their time" fully qualified to enter the ranks of skilled workmen. A scholar attending one of these schools, all other things being equal, gets a very great deal more out of his period of apprenticeship than boys who do not attend them. So certain are their results that attendance in many cities of the Empire is being made compulsory, employers being compelled to give time to apprentices to attend and to see that they do attend.

It is urged as best for those thinking of taking a course in a masons' and builders' school to spend at least the summer and spring, preceding the fall or winter in which they are to enter, with practical mechanics, working in the branch or trade they intend to study; that a good common-school education is an indispensable requisite; and that one or more years' work among machines and handling tools is a great preparatory help. In places where the winters are severe and masons' and carpenters' work is suspended, it is urged that apprentices put in the winter months at schools. To begin the battle for life the very best equipment is a sound, solid, practical education. This is to be got in just such schools as we are trying to describe. The ambition of the teacher is to build up his own and the school's record; to do this he does the best he can. Apprentices are often left by regular employers to look out for themselves, to pick up only odd bits of knowledge, dropped accidentally, never intentionally, for the apprentice's benefit. A graduate of one of these schools is independent of accident; what he sees and hears he drinks in understandingly.

The method of teaching that secures the best application of what is learned is regarded as the one to use. The application is not left

to chance or the scholar's industry, but is obligatory and is carried out under the teachers' eyes and by their direction. Every boy must practice. By the careful and judicious changing of the work, it is kept from becoming monotonous. Lazy, indifferent lads are never left to themselves, nor to disturb others. Taken under the influence of the teachers, studied and watched, these, too, are turned out regular, careful, useful workmen. All are taught to be honest, faithful, and self-reliant.

SCHOOL FOR PLUMBERS.

In 1877, a plumbers' school was opened at Aue, Saxony. Its purpose was to give young men intending to take up plumbing, or any branch of the trade, such theoretical and practical knowledge as would make the apprentice period pleasant and profitable. It was intended to give them, in the shortest time, business training and industrial-art, as well as practical knowledge. It seems to have had its origin in a desire to supply plumbers' apprentices with just such a preliminary training as would fit them to understand their calling without undergoing the long years of drudgery, and practically learning very little, under the old system. Trained as in the school at Aue, they would be profiting from the first moment of their apprenticeship.

Since its foundation, the school has sent out 600 trained pupils, who have reflected credit on their teachers. Its members have kept on increasing year after year, until now no young man in Saxony intending to be a plumber who can afford it neglects a partial, if not a full, course in the Aue school, and practical plumbers prefer its graduates as apprentices.

A graduate from such a school brings to the shop an enthusiasm and attention, a knowledge and skill, that aid his employer and himself. The division of labor to-day is so complete that apprentices in large shops have very seldom an opportunity to learn a trade thoroughly. They learn only a part—some special branch. Of the whole, they have hardly an idea. In small shops, masters seldom teach a lad much before the last year. The Aue school puts it into the boy's power to learn everything, and puts it out of the master's power to keep much from him. An Aue graduate can take up any branch of the plumber's trade and learn it in a short time. The purpose of the school is to bring out and build up all that is best in a boy's nature, to inspire a love for his work, to give him just such knowledge as will make him understand and do

even the most difficult work. Not only the practical or utilitarian side of the trade is shown to him, but also its scientific and artistic phases, its relations to art and architecture, and its importance to sanitation.

TWO WEAVING SCHOOLS.

In no branch is technical knowledge so necessary and useful as in the textile industry. It is not hard to spin coarse cottons, woolens, jutes, or linens, or to weave them; but to spin 60s, 80s, 100s, and up to 200s, to arrange and weave the multitude of complicated patterns turned off in Jacquard or fancy looms, calls for extraordinary skill.

Recognizing these facts, Germany, knowing that competition could be kept up with England and France only by good goods at fair prices, established schools in which to train her industrial captains.

The High School for Weaving in Chemnitz had its origin in 1857. It was designed to make Saxony independent of imported "captains" or experts. It has been splendidly supported by the State Government in the persons of members of the Royal Interior Department and by the city of Chemnitz.

The school is rich in new patterns, drawings, yarn collections, and books dealing with spinning, weaving, and finishing. The books are excellent aids.

There is a large recitation room, simply but comfortably fitted up. In this, lectures are listened to and questions asked and answered by teacher and students. Beyond, are large rooms or halls on three floors filled with every kind of loom on earth, from the simplest hand loom to the most recent and complicated of the famous Jacquards. From the recitation or lecture room, the scholars are led into the "shops" and put at the looms. Nor are they left alone here. Trained professors, men who might leave the school and run any weaving establishment in the Kingdom, stand beside the boys, pull the lathe, thread the shuttle, and arrange and explain the patterns so minutely, skillfully, and interestingly that only eager listeners surround them.

Since 1852, Mülheim, on the Rhine, in the midst of the Rhineland cloth-making country, has had one of the world's most famous schools for weaving. Down to 1870, with a patent law for each petty state, duchy, and province, invention had very little encouragement in Germany. To-day, it is different. Since the reorganization

of the Empire, a great change has come over the face of all things in the nation. Nowhere is this change more noticeable than in the imperial patent office, and the motive for including Mülheim's school here is to show that the whole Empire, not any one part, has these schools.

Nineteen hundred "captains" of weaving have gone out of this Mülheim school into all parts of Germany, France, England, Russia, Austria, Hungary, Bohemia, Italy, Switzerland, Sweden, Denmark, North America, Japan, etc. It is no longer necessary to wonder why it is that New England's boss weavers, dyers, bleachers, designers, etc., come from Europe, as many of them do to this day.

Like the Chemnitz school for weaving, the one at Mülheim trains boys and men to be directors, master workmen, designers, fixers, etc. It also gives young men who wish to travel as buyers or sellers such exact knowledge of wares as will make them experts.

THE CHEMNITZ KNITTING SCHOOL.

This school had its origin in a desire to create captains of industry capable of competing with England's, and to make Chemnitz independent of imported overseers. The effort has been a complete success. Not only are there no more English knitters imported, but they are no longer needed, the Chemnitz school furnishing all that are wanted.

The work of the school, unlike the one at Limbach and so many other technical schools in Germany, is entirely practical. The theory of knitting plays no part in the school's regular programme. It is the intention of the directors, however, to ask the State to support a teacher of theory. There are fifty-three scholars and two teachers. The latter are men who showed exceptional skill and ability in the factories, one of them having visited France and England to work in shops and study machines in those countries. The classes are so "cut up" that never more than ten are working at one time, *i. e.*, under obligatory hours. The boys begin with the spooling or winding of the yarn and with all kinds of hand and treadle machines, from the oldest (similar to the one invented by Lee in England) to the most recent and complicated. Step by step, from the first machine, in historical succession, with analyses of eccentric and cam movements, the boys advance, guided at each step by professors who are perfectly familiar with what it is necessary to know. The machines make stockings, jackets (knit, like the so-called Cardigans), underclothes, and gloves. Next, the boys

work on machines for making the following articles, advancing to higher work as they become more expert: Hoods, shawls, cloths, and stockings; gloves, bed and table cloths, or covers, portières, curtains, etc.; feet and legs of stockings, vests (knit), waists, wristers, children's and ladies' yarn jackets, sofa covers, etc.; English and French knitting machines, especially the so-called round frames for making stuff for stockings, underwear, jackets, bathing clothes, traveling rugs, cloths, etc.; page frames for making regular hosiery; sewing and chaining machines.

In one year, Chemnitz sends to the United States knit goods to the value of \$12,000,000—more than one-half of her entire product. To-day, in spite of Nottingham, she is selling in England; she is flooding Russia and South America.

A GERMAN MANUFACTURER'S METHODS.

J. C. Monaghan, a United States Consul in Germany, writes as follows in No. 167 of the Consular reports relative to the methods of the modern German manufacturer:

"One of the leading tool manufacturers here—Mr. Reinnecker—worked thirty-five years ago in a shop 8 by 10 feet, assisted by one boy, compelled, as was the custom near and in Chemnitz in those times, to take his goods from shop to shop to sell. To-day he has one of the finest plants on earth. He sells to England, Russia, and South America. He employs from 250 to 300 men, and runs all the year round.

"The architectural arrangement of his shop is the most practical and perfect of its kind I have ever seen. The offices and drafting rooms run all along the north side, are elegantly lighted, and are splendidly fitted up. Beyond, to the south, with angulated glass roofs, run the shops. Doors open out of the offices and drafting rooms into a long, well-lighted corridor, from which one can see every part of the large machinery hall, or combination of shops, and watch the workers. In this hall, every machine, with very few exceptions, is from the United States. In the engine house, is a Westinghouse 100-horse-power engine, of which Mr. Reinnecker speaks with pride. This he holds in reserve, so great is his reliance on its safety, security, and power to do good work. It cost him a little less than \$1,500. Side by side with it is a 100-horse-power engine from the Saxon Machine Company of this city, that cost more than \$4,000.

"Prior to the seventies, Mr. Reinnecker set up as his model a Swiss firm. Outstripping this in five years, he turned to England to find a model in Manchester. Before long, he saw this firm sink behind his ever-widening horizon of sales. In 1873, he went to the World's Fair in Vienna. There, as he told me, he met the mechanisms of Brown & Sharp. It was a revelation. Henceforth, these

were his teachers. To outstrip these was the task he laid out for himself and sons. Three times he asked the Rhode Island firm to sell him their machine for making gear-cutters; three times he was refused. Learning that some one in Dusseldorf had designed and made such a machine, he journeyed thither, saw it, bought it, set it up, and began to make his own tools. About this time, he bought from Brown & Sharp ten or twelve machines, used some of them for models, and made one hundred or more for himself. About this time, also, Madgeburg was making great quantities of beet-root sugar and wanted cutters. Still thinking of ways and means to make out the secret of Brown & Sharp's machine, he wrote to that firm and asked that his oldest boy, a young man who had had the very best training obtainable in Germany's technical schools, be taken into their shop. This was granted, the boy sailed, entered the shops, and spent six months. What he learned, or how much, I do not know. I only know that a short time afterwards Reinnecker & Sons had invented a machine to do not only all that Brown & Sharp's did, but a great deal more. This machine was at the Chicago Fair. To-day, the firm is making cutters, microscopical almost in smallness, and cutters for cutting teeth in the biggest of driving gears. Their machine works automatically, has three shafts (spindles, he called them), and in many ways looks like some of Sharp's machines that I have seen. Their ambition is to equal and then beat the firm they have been following since 1873. They boast of successful sales in Germany and Russia, and claim that they are Brown & Sharp's closest competitors.

"This taking in of German manufacturers' sons is a great mistake, from the manufacturers' point of view, and one common in the United States. England, I learn, labors under a similar delusion—that it does no harm. I have on my desk at this moment drawings of most intricate machinery made from memory by a German draftsman after he had gone through several shops in which he either was not allowed to, or did not venture to take notes. Not till I saw these did I understand why it is that in German industrial, industrial-art, and technical schools more time and attention is given to drawing than to any other branch—very often twice as much."

EDUCATION FOR MASTER WORKMEN.

The Germans are not content with the training of the youth who intend to become tradesmen, but continue the education of mechanics after they become journeymen. Such schools are established in various parts of the Empire. In Chemnitz, for instance, opportunity is given for instruction in the following departments:

Mill-building. Characteristic of different systems of cutting mills; their return of power expended; fitting of oil mills with special regard to hydraulic presses and pumps; milling processes;

the most important of the preparatory and auxiliary machines used in flour making.

Waterworks construction. Obtaining and storing water; cisterns; improvement of springs; sinking ordinary and artesian wells; purifying river water; water pipes; reservoirs; characteristics of different systems of pumps; calculation of their capacity and their necessary use in mechanical work.

Machine-tool building. Description and calculation of machine tools for working metal and wood, especially lathes, boring and cutting machines, planing and grooving machines, screw-cutting machines; illustration of working of the foregoing; tools; carving and edge tools; use of power; ascertaining motion of principal and supplementary, direct and transmitted motion; reference to constructive forms and peculiarities of machine tools; study of details.

Brewery mechanics. General view of preparation of beer from grain; materials used in making beer, their qualities so far as important to the brewer, and the machines and buildings used in their preparation and preservation; preparation of malt; cleaning and sorting the grain; soaking; setting on the malt floor; mechanical setting apparatus; malt kilns and their management in preparing different kinds of malt; marks and qualities of a good malt; its cleaning and preservation; brewing with wort and the machinery employed; malt presses, mash machines, clarifying apparatus; brewing pans and the necessary mason work; pump and piping; hop strainers; hop presses; boiling-house arrangement; cooling apparatus.

Distillery machines. Alcohol and the characteristics most important to the understanding of the distilling processes; general view of the manufacture of spirits and the materials used; potatoes and their characteristics; producing of the mash machines for washing; the older machines for boiling, cleaning and mashing potatoes; description, working and use of the newer mashing apparatus; preparation of distilling malt and its difference from brewing malt; thinning and cooling of mash; cooling apparatus; description of fermentation and preparation of yeast, and the space and apparatus used; building, working and use of the distillery apparatus.

Paper manufacture. Historical; range of modern papers; kinds; raw materials and auxiliary materials.

Half-material manufacture. Cutters, dusters, boilers, engines,

defibrers, refiners, sorters; soda process for production of straw and esparto materials; soda sulphate and sulphite process for wood pulp, with the proper machinery; bleaching with chlorine gas and chloride of lime; the proper machines and fittings; whole-material manufacture; engines, refiners, crushing mills, new German apparatus (circular stamp work); mixing, sizing and dyeing; engine mixing; application of colors; hand paper machines; air drying; long-sieve and round-sieve paper machines; dampening, glazing, cutting and rolling with the proper machinery; sorting, numbering and packing; packing presses.

Fire extinguishing. Natural and artificial extinguishing agents; water presses and hydrants; the outfit, wagon, pails, hose, engines and their auxiliaries, ladders, etc.; demolishing tools; the service; giving the alarm; lighting; tactics for large, medium and small fires; rescue apparatus; rescue bags, life-saving nets, lines, etc.

General electro-technique, exclusive of telegraph. Brief review of instruction in electricity and magnetism; fittings, manner of working, use and trial of dynamo-electric machines; electric lighting and transmission of power; accumulators.

Spinning. Peculiarities of the different spun fibers and the consequent variations in the preparative and spinning process; individual machines, considering the principal points of the less easily understood mechanism; calculation of loss of power and capacity (using gauge bar); elementary theory of the flier.

Weaving. Classification of woven goods; the simple hand loom and its parts; the beginning and finishing process; coupers, dobby or treadle machines; Jacquard machines; figuring and lancing; double-woven goods, velvet, chenille, preparation for weaving, spooling, shearing, dressing, the mark, etc.; mechanical preparation with the necessary machinery; mechanical looms, arrangement, frames, motive mechanism, the mechanism for weaving of presses, guards and harness, safety appliances; ketten and cloth beam regulation; treadle machines; drop-box lathes.

Mechanics of finishing processes. Description of the apparatus and machinery necessary in the dyeing and finishing process in weaving, especially washing, drying, ringing, strengthening, steaming, sprinkling, smoothing and polishing, fulling, roughing, shearing, etc., in different kinds of weaving.

Hosiery-knitting. Hand knitting, meshing of plain goods, necessary tools; kinds of hand frames; frame numbers and yarn numbers; meshing of plain and ribbed goods in hand frames; knit

goods varieties (plain and ribbed); mechanical knitting (plain knitters, round and flat); rib knitters; knitting machines; shaping and finishing knit goods.

IN SWITZERLAND.

On June 27, 1884, a resolution was adopted by the federal congress of Switzerland granting subsidies, under certain conditions, to all institutions for professional and industrial education that desired to accept such aid. It resulted in the establishment of new, and the development of existing institutions, and has given a great impetus to industrial education throughout the country. Since the adoption of the resolution the number of trade schools has been nearly doubled, and other industrial institutions, such as drawing schools, workingmen's evening schools, industrial art schools, etc., have greatly increased in number and efficiency. The following is a translation from the text of the resolution :

ARTICLE 1. For the purpose of advancing professional and industrial education the confederation will grant subsidies out of its treasury to any institutions that are or will be established for such objects. When any of these institutions have other objects aside from professional and industrial education, as, for instance, general education, the federal contribution will be made only for the former branch.

ART. 2. The following are regarded as institutions for industrial and professional education :

The workingmen's schools, the schools for professional improvement and industrial drawing schools, even if these are in connection with the public schools, the higher industrial and professional schools, the art schools, the trade schools, collections of patterns, models and other materials for technical instruction and professional and industrial museums.

The schools, which are aided by the government under the above resolution, numbered 124 in 1890, and the total amount of the subsidy voted for their assistance was \$258,132. This gives an idea of the value put upon technical education in the little republic of Switzerland. The institutions entitled to federal subsidies are divided into three classes by the department of commerce and agriculture: Trade schools (including schools for watchmaking and weaving, workshops for apprentices, pattern and model collections, etc.); industrial art institutions (schools and collections); workingmen's schools, drawing schools and schools for professional improvement. As might be expected, watchmaking schools predominate among the trade schools.

THE SCHOOL AT LOCLE.

This institution illustrates the methods and results arrived at in one of these primary institutions for mechanical training. It was founded in 1868, and is a municipal institution. Its object is "to offer to young men who wish to devote themselves to the watch-making industry, and also to working men who wish to complete their education, the means of making an apprenticeship thorough, and of acquiring such knowledge as they may have to utilize."

The course of study of the division for watchmaking comprises the manufacture of the various kinds of watches and all other work relating to the profession, also theoretical instruction; it covers three years. The practical work includes, successively, the manufacture of tools used in watchmaking, the rough work without the barrel or spring box, the rough work with the barrel, the mechanisms for winding, the wheel work, cylinder escapements, anchor escapements, adjusting and regulating. The work done includes key and stem-winders of various kinds, repeaters, watches indicating dates and phases of the moon, chronometers and other complicated pieces. The theoretical work comprises: First year—algebra, elementary geometry, descriptive geometry, metallurgy, technical drawing and theory of watchmaking; second year—algebra, geometry, trigonometry, industrial mechanics, technical drawing and theory of watchmaking; third year—algebra, general mechanics, physics, electrotechnics, technical drawing and theory of watchmaking.

The course of study of the division for mechanics comprises the manufacture of the various tools and machinery used in the watch-making industry, and also other fine apparatus. The theoretical instruction is the same as in the division for watchmaking. This course comprises also three years. The practical work done includes, among other things, all kinds of smaller tools, steel rules and squares, compasses, tools for cutting and boring, screw gauges, various tools used in turning, measuring instruments, anvils for watchmakers, piercing and grooving machines, lathes, machines for cutting wheels, for stamping and for polishing, etc.; also repairing all kinds of watchmaking tools and machinery.

The school is in session every day except on Sundays and holidays. There is no vacation. The work continues from 7 A. M. in summer and 8 A. M. in winter until 7 P. M., with an intermission of one and one-half hours at noon for dinner. About nine hours per

week are devoted to theoretical instruction. All the other time is spent in the performance of practical work.

WIPKINGEN SCHOOL OF SILK WEAVING.

This school was founded in 1881. It is owned by the Association of Silk Manufacturers of Zurich and vicinity. Its object is to perfect young men in the higher branches of work of the silk weaving industry, such as mill superintending, and work in the designing, arranging, and finishing departments. It is also intended for the education of manufacturers and dealers of silk textiles.

The course of study covers two years as follows :

First year. Plain weaving. Practical work : Hand weaving—winding, warping, drawing-in, piecing, preparing looms, card making, spooling, harness mounting, weaving on the Zurich and Lyons looms, velvet, gauze, and ribbon looms, with the hand and fly shuttle, shaft machine, etc., manufacturing taffetas, serges, satins, armures, velvets, plushes, gauzes, pekings, bayadères, and checked goods ; power loom weaving—building, fitting, adjusting, and taking apart power looms, winding, warping, and spooling, preparing, arranging cards, etc., weaving on the power looms, plain and treadle work, etc., manufacturing taffetas (pupils may also begin on the Jacquard loom), simple and combined treadle work, etc. Theoretical work : Lectures—historical development of the silk industry and its present condition in the different countries, silk culture, spinning, twisting, grading of fineness, drying of raw silks, properties, classification, and means of dyeing silks (the school possesses contrivances for illustrating the methods of spinning and weaving silks), on preparing silk and half silk tissues ; instructions in drawing-in and piecing, the weaving, finishing, and uses of silk textiles, such as taffetas, serges, satins, armures, bayadères, pekings, and carreaux, velvets, plushes, and gauzes, mill bookkeeping and calculating ; theory of hand loom weaving—description and explanation of the various looms, utensils, and work connected with hand loom weaving and preparation of plans and drawings of the same ; theory of power loom weaving—description and explanation of the various looms, auxiliary machines and contrivances connected with shaft loom weaving, and preparation of the necessary drawings, instruction in mechanics, the parts of weaving machinery, and technical drawing ; free-hand and pattern drawing—instructions in drawing from copy and in designing striped and checked patterns, science of

colors (this part is intended to educate the taste for form and color ; such pupils as intend to become pattern designers may increase the time spent in this work by dispensing with some other branches).

Second year. Jacquard weaving. Practical work : Hand loom weaving—preparatory work for weaving, card cutting and binding, weaving on Jacquard looms with single harness and with lift shafts, with lowering healds, with damask appliances, looms for fancy weaving, etc., manufacturing *lisérés*, *lancés*, *brochés*, *mexicaines*, damasks, *marquises*, *matelassés*, and figured velvets ; power loom weaving—preparatory work as above, weaving with single harness and with lift shafts on the various looms for manufacturing *lisérés*, *lancés*, damassés, figured gauzes, and smooth double backed velvets. Theoretical work : Lectures—on the origin of the raw silks, the properties, and the most judicious employment of the same in manufacturing, on floss silk, cotton, and wool, their manipulation, numbering, and their employment in mixing with silk, on establishing and managing a silk manufactory ; instructions in preparatory work, in designing patterns for *lisérés*, *lancés*, *brochés*, *mexicaines*, damassés, *marquises*, *matelassés*, damasks, *brocatels*, *lampas*, figured velvets, and gauzes, in the mathematics of Jacquard weaving ; theory of hand loom weaving—explanations of the work incidental to Jacquard hand loom weaving, preparatory work, transferring designs, card cutting and binding, the various contrivances, tools, and machines used in this work, and the preparation of the necessary drawings ; theory of power loom weaving—description and explanation of the uses of the various kinds of power looms and auxiliary machines for Jacquard weaving, the preparation of cards, executing the necessary drawings, instructions in draughting machinery ; free-hand and pattern drawing—instructions in drawing from copy and from textiles, designing figured patterns for cravats and dress goods, styles of ornamentation (pupils desiring to become designers of Jacquard patterns can arrange to devote more time to drawing than others). Annual excursions are made to establishments where silk is manufactured, such as factories for twisting thread, dye-works, weaving mills, dressing and finishing rooms, silk drying works, machine shops, etc., for the purpose of giving the pupils an idea of the more practical work.

In order to give pupils the best opportunities possible for pursuing their studies an extensive library of technical works and a rich collection of old textiles have been bought for the school. These are at the disposal of the pupils every Saturday afternoon.

The school possesses all necessary machinery and appliances, which are replaced or supplemented from time to time by the latest improvements. At present the school possesses 24 hand looms, of which 9 are Jacquards, and 18 power looms, of which 6 are Jacquards.

HOUSEKEEPING SCHOOLS.

There are several of these schools in Switzerland and the one at Buchs can be taken as an example of what is attempted in them. The object of this school is to give to young ladies leaving school a good theoretical and practical training in all that relates to the duties of a housewife. Pupils are generally the daughters of the middle or wealthier classes.

The term is for three months and comprises the following courses :

Theoretical instruction. Science of cooking—instruction concerning the most important nutritive substances in food and the arrangement of the latter accordingly, preparation of meals for the sick and for the healthy, preserving fruit and vegetables, methods of heating, suitable cooking utensils, fuel, etc.; science of nourishment—instruction concerning the chemical composition of the human body, its functions, its chemical changes, nutritive process, etc.; hygiene—instruction regarding the care of the body, the sustenance, clothing, habitation, air and ventilation; washing and cleaning—instruction regarding the care of articles during the process of washing, washing linens and other articles of wearing apparel, especially as to the application of washing appliances and chemicals, etc.; bookkeeping—instruction in keeping simple practical household accounts; science of housekeeping in general; lectures on the moral-religious duties of a housewife.

Practical instruction. The preparation of meals for a good home table—this includes at present 31 varieties of soup, 19 ways of preparing beef, 25 of veal, 9 of pork, 4 of mutton, 11 of mixed meats, 4 of fish, 15 of poultry, 12 of game, 16 kinds of sauces, 37 ways of preparing green vegetables, 35 varieties of egg, milk, and farinaceous foods, 17 ways of serving omelets and eggs, 11 kinds of pastry, 11 of warm puddings, 13 of cold puddings, 7 kinds of pudding sauces, 10 of creams, 7 kinds of stewed fruits, 4 kinds of dough, 28 varieties of cakes and tarts, 18 of small cookies, 7 of dumplings, and 9 of patties. For the purpose of giving the pupils ample opportunity in the cooking of these articles orders for cakes, meats, etc., are taken from outsiders for dinners, parties, etc..

A book of recipes is published by the matron, covering all the dishes prepared at the school. This is sold only to pupils to be used as a memorandum of the cooking learned at the school. The practical instruction also includes regular and proper arrangement of the dining room, the kitchen, the dining table, as well as the manner of serving ; practical points for buying food ; instruction in washing, wringing, and ironing linens ; cleaning the bedrooms, sitting rooms, cellars, and in fact the whole house ; instruction in the making of bed and table linens, garments, taking measurements, drawing patterns, cutting and fitting ladies' dresses, which are optional.

IN ITALY.

Italy is beginning to feel the influence of the international movement in favor of manual training and technical education. Though handicapped by peculiar difficulties in entering upon the work of reconstructing her school system, she has bravely made an effort in this direction ; and will doubtless succeed at last in so readjusting the relations of her educational establishments as to bring them into closer harmony with the conditions of modern commercial life and business enterprise.

A bill was introduced in the chamber of deputies (of the Italian parliament) during the session of 1889-'90, under the joint authority of the minister of agriculture, industry, and commerce, and the minister of public instruction, which provided for the reorganization of the school system of Italy, and the gradual evolution of art and trade schools, and of special schools for the promotion of industry and commerce.

On presenting this bill the two above named officers addressed to the chamber of deputies a clear and logical memorial in support of the measure. They urged that the bill "does not create a new type of school, but determines the legal status of existing types." They advocated a reform in school management, however, as entirely feasible without doing violence to established methods.

"The technical school," said they, "has two functions—one is to give the general culture necessary for admission to the technical institute, the other is to give the special training that is an end in itself. * * * * *

The character of this special training should depend upon the particular enterprises carried on in the respective localities, whether art, industry, or commerce predominates."

In Italy, at the close of the school year 1886-'87, there were 419 technical schools, and 74 institutes of secondary technical instruction. In the technical schools there were 28,140 pupils in regular standing as to membership, and 628 auditors, or pupils attending certain classes, but not enrolled as full time students. The technical institutes, which are of a higher grade than the technical schools, had at that date 6,231 students and 410 auditors.

In proportion to the population there is in Italy one technical school to every 67,923 of the inhabitants and one technical institute to every 384,589 of the inhabitants, or 57,727 inhabitants for each technical institution of higher and lower grade. There are 12.08 technical students in these schools to every 10,000 of the population. The number of technical schools in Italy increased by more than one hundred from 1880 to 1887. In the year 1880 there were 314, while in 1887 there were, as above stated, 419. Within the same period the number of pupils increased from 22,120 to 28,140.

Some of these technical institutes are said to have given a strong impulse to local industries. Thus the British commissioners report that the directors of the silk dyeing establishment at Como spoke in high praise of the influence of the technical school of Como. It had materially and beneficially affected the silk industry by greatly increasing the knowledge both of masters and foremen. A higher culture in designing had led to more variety, more enterprise, and increased trade. A few years ago scarcely anything but the weaving of plain silks was attempted; now there is a growing fancy trade, the influence of which is felt in a marked degree at these works, by the greater demand for varied and delicate colors in the dyeing.

IN THE SCANDINAVIAN COUNTRIES.

Trade schools have not, as yet, attained great importance in Scandinavian countries. Outside the trade departments of some of the technical schools but few exist, and these are still in their infancy. Among artisans there is a strong opposition to the ordinary trade school; but the general opinion among educators and others favors them, and almost every employer finds youths who have graduated from trade schools superior both as artisans and as men. The most important trade schools are those for weaving in Sweden; schools for wood carvers and one for mechanics in Norway; and schools for shoemakers and watchmakers in Denmark. A number of new schools are spoken of, and some are soon to be opened.

Of much greater importance, as yet, than the trade schools in the industrial life of the Scandinavian countries are the technical schools, of which (not including technological institutes) Norway has fourteen, Sweden thirty-four, and Denmark eighty-two. All of these schools receive support from the governments of their respective countries. They are for the greater part evening schools, and have as their chief object the technical education of artisans, though a few of them offer facilities for general academic studies. A few have trade departments, but most of them are content to give theoretical instruction in the trades, leaving it to the pupils to obtain manual skill in the shops. The greatest attention is paid to drawing of all kinds, especially trade and mechanical drawing. The great majority of the pupils of these technical schools are working already at some trade. Employers are obliged sometimes to send the youths who work for them to these schools; others are glad to pay their fees, and encourage all to attend.

It was observed that nearly every foreman of a shop was a graduate of some technical school. Some idea of the importance given these schools in Scandinavian countries may be gathered from the fact that in Denmark alone, with its 2,500,000 inhabitants, about 10,000 pupils attend technical schools every year.

Next in importance to the technical schools are, in Norway and Denmark, the so-called schools of home industry, their task being the revival of home industry among the country population by teaching the men to do such carpenter and blacksmith work as may be useful to the farmer, and the women, weaving, spinning, etc., and also different kinds of ornamental work for those who desire it. These schools are regarded as productive of great economic results, in many cases enabling country laborers to double their income during the winter months. In Denmark no less than 500 schools of home industry exist, generally in connection with other schools, and are supported by 400 societies for the promotion of home industry, and in part by the government.

In Sweden few schools of this kind exist, as home industry has always flourished in that country, and skill in all kinds of manual work has been transmitted from generation to generation.

The technical school at Stockholm has for its aim to give a clear and practical training in the knowledge which is requisite for an intelligent and accurate execution of industrial work and by this means to further Swedish handicrafts and the development and improvement of art industry. The departments are five in number :

1. The technical evening and Sunday school, intended for young pupils and men, more particularly those who are already engaged in factories and handicrafts. The pupils are free in their choice of subjects, and the scheme of study is so arranged that the students have a selection from eighteen branches of industrial education.

2. The technical school for women, which endeavors to impart to women that artistic insight and skill that will enable them to secure profitable technical employment. The subjects of instruction are nine in number and are at the student's choice.

3. The higher art industrial school has both men and women students, and the three years' course of instruction demands the whole or the greater part of the school day during the term. In the first section of this school is taught pattern-drawing; in the second, decorative painting, lacquer work, etc.; in the third, modeling, ornamenting, etc.; in the fourth, wood-carving, chasing, engraving, and work in the finer metals; and in the fifth section are trained the future teachers of drawing, modeling, and handwriting in the schools for secondary instruction, technical elementary schools, and normal colleges for teachers.

4. The school of building, with a course of three full years and an obligatory scheme of instruction, gives a training in the knowledge requisite for the strict accuracy demanded in the preparation of building plans.

5. The school for machine work gives that instruction required for the extremely accurate knowledge demanded by mechanical technical work and (as does the previous department) receives pupils who are above sixteen years of age. The first section is for the training of chief engineers, machinists, and draftsmen in mechanical workshops; in the second foremen of mills receive instruction; the third deals with assistant engineers and machinists, workers of metal plate for steam boilers, smiths, makers of mechanical instruments, makers of clocks and watches, etc.; in the fourth shipbuilders receive their training; the fifth gives instruction to metal-plate workers for house, bridge, and railway construction and to constructors of water and gas systems, etc.; the sixth gives instructions to founders; and the seventh is for the training of electro-machinists. Besides these ordinary departments, there is an additional school giving daily instruction in professional and decorative painting.

The number of teachers and pupils at the technical schools during

the spring term of 1892 and the amount of Government and communal grants in the same year are shown in the following table:

SCHOOLS.	GRANTS FOR 1892.		PUPILS.		Teachers.
	Government.	Communal.	Men.	Women.	
Technical High School, Stockholm.....	\$39,316	.....	272	..	26
Chalmer's Technical Institute, Gothenberg.	10,666	....	212	....	13
Technical School, Stockholm.....	25,212	\$2,010	981	451	70
Four technical elementary schools.....	25,406	134	240	....	36
Technical school at Eskilstuna.....	3,216	407	155	4	11
Twenty-nine technical professional schools.	9,326	17,500	2,915	851	210
Total.....	\$113,142	\$20,046	4,775	1,306	368

Besides the above-mentioned grants, the schools disposed of donated funds as follows: Technical High School, \$33,500; Chalmer's Technical Institute, \$93,800; technical school at Stockholm, \$16,884; technical school at Eskilstuna, \$7,370.

In Norway there are technical schools at Christiania, Trondhjem, and Bergen, established upon the same principles as the technical schools in Sweden, which are supported partly by the Government and partly by the communities.

IN GREAT BRITAIN.

England has been more conservative in establishing trade or technical schools with Governmental aid than Germany or France. Commencing about the year 1882, however, what has been termed a technical education scare swept over England, owing to the fear that Germany was competing with increasing success for the foreign trade of the world. This advantage was believed to be due to her system of technical instruction. As a result of this apprehension concerning trade a great deal of attention was given to the subject during succeeding years. A royal commission was appointed by parliament to inquire into the various technical and trade schools on the continent with a special view of reporting upon the effect the instruction given in these schools had upon the industries of the various countries in which they were situated.

The charity commissioners were created by act of parliament in 1853 to superintend the administration of charitable and educational endowments all over Great Britain. In 1853 Prof. James Bryce carried through Parliament an act providing for the consolidation of all the old parochial charities in London (the objects of many of which had totally ceased to exist), and the application of the income to the welfare of the poorer classes throughout the metropolis, under the management of the charity commissioners, by means of facilities for industrial and technical teaching, the support of museums and libraries, the creation of recreation grounds, the establishment or aid of hospitals, asylums and similar provident institutions, and such other agencies as might approve themselves to the commissioners as promotive, in the language of the act, of "the physical, social and moral condition of the poorer inhabitants."

The great impetus that has been given to improvement in the handicrafts and in technical acquirement on the part of the masses was due primarily (and is chiefly maintained in Great Britain to-day) to the persistent and remarkably intelligent zeal of a comparatively few individuals for the welfare of their less fortunate neighbors.

This has been excellently supplemented by the equally intelligent action of certain of the great manufacturing and commercial guilds for which London is especially famed, having, it is true, something of self interest to prompt them, yet actuated withal by much of the same broad purpose which stimulated their forerunners. Yet, thanks to the happily available funds at the disposal of the charity commissioners and the good management and disposition of the latter, nearly all of the best schools of technology in Great Britain, particularly those of the metropolis, are now of the second class, being recipients of material aid from the government through the hands of the charity board, their efficiency being thus largely increased.

Among the most active and efficient agencies in furthering the cause of technical education is to be reckoned the National Association for the promotion of Technical Education, of which the Marquis of Hartington, M. P., is president; Sir John Lubbock, Bart., M. P., is treasurer; whose secretaries are Sir Henry E. Roscoe, M. P., and Mr. Arthur H. D. Acland, M. P.; and whose assistant secretary is Mr. H. Llewellyn Smith, B. A., B. Sc.

The object of this association is not to interfere with the teaching of trades in workshops, or with industrial and commercial train-

ing in the manufactory and in the warehouse. It desires to develop increased general dexterity of hand and eye among the young, which may be especially useful to those who earn their own livelihood, and at the same time improve rather than hinder their general education; to bring about more independent and thorough knowledge of those principles of art and science which underlie much of the industrial work of the nation; and to encourage better secondary instruction generally, which will include a more effective teaching of foreign languages and science, for those who have to guide commercial relations abroad and to develop industries at home.

Here are plainly defined the purposes and the limitations of the effort which the association proposes to itself. Some of the difficulties encountered in reducing to practical effect the provisions of the technical instruction act, and some of the partial success achieved under it, are set forth in a report made by the secretaries and assistant secretary of the National Association, and published in London in 1889 under the title, *Technical Education in England and Wales*.

BIRMINGHAM MUNICIPAL TECHNICAL SCHOOL.

The Birmingham Municipal Technical School is to be rated as a manual training school of high grade. This school was established for the purpose of carrying out a liberal scheme of technical education, which was rendered possible by the technical education act of 1890. It does not undertake to teach the practice of trades in the class room. But in the school the student learns the scientific principles on which the various local industries are based. The Birmingham Seventh Standard Technical School is under the control of the Birmingham school board. Instruction is given in the school in those sciences and arts upon which the trades and manufactures of the town are based. It is contended that the result of such instruction in the board school is that a boy instead of having possibly to spend two or three years as an errand boy before being initiated into some handicraft with which he is entirely ignorant is, after spending a couple of years at such a school, enabled to enter a manufactory already instructed in the use of tools of the craft he is about to follow; as a consequence of intelligent training in the elementary principles, he is enabled at once to command higher wages, and is a more thoughtful and original worker. It is also argued that in consequence of the decline in the apprenticeship

system some such preliminary training is requisite in order that a lad may learn more than just one particular branch of his trade.

As a result of the introduction of machinery in every branch and detail of manufacture a workman is frequently kept upon one special description of work. If the demand for the article, upon which, perhaps, he has for years been at work, declines, he is placed at a great disadvantage in regaining employment, as he has had no general training. The result, therefore, of the system adopted by the school board is felt to be that employment will not only be more constant, but that the work of the skilled mechanic will be of more value, and consequently it will be accompanied by an increase in wages.

Parents entering their boys in the Birmingham Seventh Standard Technical School have to sign a declaration that they will keep the boys at school for a period of at least two years. This is done to insure their receiving an adequate and proper course of instruction, and also to enable them to earn the government grants in the science subjects for the two years.

In this school the subjects taught are arithmetic, drawing, theoretical and practical mechanics, chemistry, electricity, model and machine drawing, geometry and principles of machinery, with laboratory and workshop practice.

The school board believes it necessary to provide for the technical training of artisans, and states the case as follows :

"Competition with the better trained workmen of the continent and America is becoming more and more severe every day, and is actually taking some of the means of livelihood away from the English workman. A more thorough and more scientific training of the artisans of Birmingham will greatly improve the articles manufactured here in style, design and delicacy of workmanship, and will also lead to a lessened cost of production ; the trade of the town, where it now languishes, will revive, new developments of mechanical skill will open out new trades, employment will be more constant and the wages of the skilled workman will rise."

THE FAMOUS PEOPLE'S PALACE.

Beaumont Institute, or the People's Palace, Mile End road, London, E., was founded by John B. Beaumont about 1840, and was re-established in 1887. The management is vested in trustees. There is accommodation for 500 day and 5,000 evening students, 4,360 (360 day and 4,000 evening students) being in attendance. The age of admission is twelve years and upward. There are

classes for instruction in a variety of educational and technical subjects, including practical trades, tailor's cutting, upholstery, cabinetmaking, plumbing, carpentry, wood carving, photography, etching, etc., boot and shoe making, mechanical and electrical engineering, masonry, and kindred subjects. There are also educational, science, art, design, and music classes, and special classes for females in plain needlework, garment making, dressmaking, millinery, and cookery. Other subjects, such as watchmaking, bricklaying, and the like, are in contemplation. The fees are moderate; the day students pay 6*d.* (12 cents) a week, evening students from 1*s.* to 15*s.* (24 cents to \$3.65) per quarter or session, according to the subjects taken. The work receives encouragement by means of prizes, certificates, etc., from the science and art department, the society of arts, city guilds, and the trustees. There are 325 scholarships in the day school, giving free education to public elementary school boys whose parents are in receipt of less than £200 (\$973.30) a year. For instruction in scientific and technical subjects there are well appointed laboratories and workshops. The premises and appliances cost about £25,000 (\$121,662.50), the gift of the Drapers' Company. There are endowments of £350 (\$1,703.28) from the Beaumont trust fund, £4,000 (\$19,466) (for ten years) from the Drapers' Company, of which £2,000 (\$9,733) is funded, and this is supplemented by £2,500 (\$12,166.25) a year from the charity commissioners.

The instruction given in the school workshops is not intended to take the place of a regular apprenticeship in an ordinary workshop. The object of the school workshops is to do what is often not done in the workshops of the manufacturer. In the latter the progress of the apprentice is generally very slow at the beginning, for the reason that there is no one whose special business it is to teach him and also because, the apprentice not being able to use his tools, his employer does not care to give him material to work upon for fear of having it spoiled.

Consequently the apprentice is often made an errand boy or a common laborer until, after the lapse of a considerable time and the surmounting of many difficulties, he is able to handle his tools with some profit to his employer; he is then entrusted with work upon which he can really learn his trade.

Now, in the school workshop, the pupil goes through a systematic course of instruction. The tools to be used are described, and the principles of their action fully explained. The nature and

properties of the materials upon which he is to work are also pointed out. The pupil then works out a graduated set of exercises, being always under a skilled instructor who describes how each exercise is to be done, and how the tools are to be held and used, so as to get the best result. Obviously, the pupil taught in this systematic fashion in a school shop possesses immense advantages over an ordinary apprentice.

It is deserving of mention that the pupils in the workshop of this school are required to make all articles, however simple or common, to definite and exact dimensions, from working drawings, which are generally executed by the pupils themselves. No slipshod methods or hap-hazard results are tolerated; and the shop exercises, therefore, become an excellent means of discipline.

BRADFORD TECHNICAL COLLEGE.

Another very important technical school is the Bradford Technical College, which consists of a day school, and a set of day and evening classes in various branches of science, art, and technology. Special attention is paid to the textile and dyeing departments, and there is a mechanical workshop, the aim of which appears to be more like that of the well known foreign apprenticeship schools than is usually the case in English institutions of the kind. The object of the school is said to be to produce skilled draughtsmen and mechanics, and it is stated that several students have obtained situations with railway and steamship companies immediately on leaving the college and without any subsequent training.

The yearly cost of maintenance is £7,000 (\$34,065.50). The income from fees is £2,000 (\$9,733), from grants, £1,600 (\$7,786.40), from subscriptions, £2,200 (\$10,706.30), and from other sources, £1,200 (\$5,839.80). The number of day students is 314; the number of evening students, 1,337.

The technical training for mechanical engineers and machine makers in the different technical schools is of various degrees of thoroughness, ranging from a fairly complete theoretical and practical instruction, to mere attendance on evening classes in machine construction, theoretical and applied mechanics, etc. School officials and employers unite in disavowing any intention to organize a course of instruction having for its object to substitute such training for the present training acquired during apprenticeship. In no case do they attempt to graduate a fully trained, skilled workman. Their efforts seemed to be directed toward supplementing the apprenticeship

training. For this purpose the system of evening classes is more widely developed, and the day schools are correspondingly less developed. Evening classes, in short, are more favored, and it is safe to say that from three-fifths to four-fifths of technical instruction in the trade is given in this way, and in every case the majority of the students are apprentices already in the trade. The opinion seems to be almost universal that the trade can only be learned in the shops; that the school training makes little difference in regard to manual dexterity in the use of tools, but is, however, of decided benefit in the way of general training. In view of the foregoing objections to school shop training especial attention should be directed to a unique feature of the training existing at the Bradford Technical College, where these objections seem likely to be overcome.

In addition to the regular class of students the school receives a number of student apprentices. These student workmen are received for a term of years, are given a wage somewhat less than they would receive in a regular shop, work the entire day in the shops connected with the school, are employed in the manufacture of machines and engines to be afterwards sold, and devote somewhat less time than the regular students to the theory classes. Good returns have been received from the sale of their work, and the system seems to be meeting with success.

The first course of instruction in the textile department includes a full examination of all the parts of the loom, of the different classes of looms, and their suitability for weaving different fabrics. Then follows instruction in the principles of weaving and in the arrangement of simple patterns, such as twills, stripes, etc., upon design paper; the draughting, or manner of drawing the warp threads through the healds, and the actuating the healds to weave such patterns; the production of patterns by combination; applying the patterns to fabrics suitable for them, etc.; calculations for yarns and fabrics; systems of indicating the counts of yarns in worsted, cotton, woollen, silk, etc.; the weight of folded yarn to produce a required weight; finding weight and cost of warp and weft in a fabric, etc.

The second course relates to the production and arrangement of designs for fancy goods and requiring dobbies or wytches to weave them; practical weaving at the loom of the designs produced; the Jacquard machine, double lift machines, compound harness, etc.; card cutting, weaving, and all calculations connected with the machine, and the application of the design to the fabric; double

weft-faced and double warp-faced cloths, reversible ribbons, etc.; figured double cloths, etc.; triple or multiple cloths generally.

The third course includes designing for elaborate fancy goods; the production of new floral and other designs, suitable for dress goods, damasks, etc.; gauze fabrics; figured gauze; velvet and pile fabrics, plushes, corduroys, etc.; figured velvets.

A special class studies the analysis of fabrics, etc.; testing yarns for counts, strength, elasticity, twist, etc.; microscopic examination for determining structure, etc.

There are special classes also for the study of color composition, decomposition, and combination of colors; and special art classes.

WHAT BRITISH EMPLOYERS THINK.

In England the utility of trade school training is generally conceded to be considerable, though many employers hold the opinion that the superiority of a technically educated apprentice in any mechanical occupation is manifest, not in greater manual dexterity, but in the ability to comprehend general principles and in the power of reducing theoretical knowledge to tangible results.

For example, Mr. L. A. Edwards, mechanical engineer, London agent of the Electrical Construction Company (limited), of London, himself an engineer of twenty-three years' experience and educated at King's College, says:

Technical schools, although fulfilling a useful purpose, do not come up to the practical requirements of the apprentice who has decided to adopt the engineering profession. * * *

Technical schools are mostly useful in imparting a theoretical knowledge, a subject often entirely neglected in the training of an engineer.

In another connection Mr. Edwards observes that the education of an engineer should be as general as possible to start with, and the specializing should be postponed to a later period.

Of like tenor is the letter received from a member of the firm of Burt, Boulton & Haywood, manufacturing chemists, of 64 Cannon street, London. While not disparaging thorough scientific chemical training, but insisting upon its possession as a condition precedent to employment in the business of the firm, the writer states that then it is possible to teach men, so prepared for instruction, the technical part of their business in the laboratories and manufactories. He adds:

A school professor can only teach that which he knows, and the technical training in a particular manufacture, whose processes are constantly changing and developing, can only be adequately taught in the manufacture itself.

As to the direct effect of technical instruction upon the artisan, Mr. H. W. Morley, secretary of the firm of Cole, Marchant & Morley, machinists, Bradford, writes as follows concerning an employe who had completed the full course of study at the Bradford Technical College :

He was able to work out designs and drawings of machines which he had never seen by mathematical calculations, and the principles learned at college.

Mr. George N. Hooper, senior member of the firm of Hooper & Co., carriage manufacturers, London, writes :

As a proof of the value attached to training in technical classes it may be mentioned that attendance at these classes is an essential condition to the employment of all lads engaged by this firm. The school fees are invariably paid by the firm, the prize fund is subsidized by it and special encouragement is given to lads for regular attendance, application and good progress.

In reference to the general subject of technical education in England Mr. J. C. Peachy, manager of the Ferry works, Thames Ditton, Surrey, speaking as a mechanical engineer, says :

We have in England no such institution as we understand you to refer to by "trade school." Our nearest approach to this is the mechanics' institution, where instruction on technical subjects is given to apprentices and others after their usual hours of work, and technical colleges which young men attend for a course of two or three years, either before or after apprenticeship to some branch of engineering, and preparatory to searching for employment in some capacity other than that of a workman.

The watchmakers of Coventry are unanimous and emphatic in their expression of approval of trade school training, and in their appreciation of its beneficial effect upon apprentices and of its value to employers.

The shoe manufacturers of Bristol differ widely in opinion as to the usefulness of trade school instruction for their apprentices. Messrs. Church and McPherson think the schools valuable, and Mr. H. A. Carter declares that "what is taught at the schools is far better than our secrets,"—that is, the trade secrets which many manufacturers jealously guard. J. W. Ashley & Co. dissent from

this view, and declare that, according to their experience, apprentices, "instead of being improved, were rather spoiled by the little information which they did obtain." In their opinion, "the trade cannot be learned better at schools than in the work room, but can probably be learned much more quickly ; but the employers get but little benefit."

Master plumbers at Bristol and at Aberdeen and Glasgow prefer boys educated at trade schools as apprentices, and deem them more valuable.

Mr. John Sharp probably expresses the prevailing opinion when, in referring to his trade school instruction, he says that he was benefited by it, "not in the line of becoming a more skillful user of tools, but in the theory and science information which I could not have obtained in the shops."

Brock & Son, master builders of Bristol, consider the knowledge of tools acquired in the trade school to be of but little account, while they hold that the mastery of general mechanical principles is of great advantage to the apprentice.

Managers of locomotive works say that technical instruction greatly aids the apprentice in his business, inasmuch as it enables him to read drawings and work from a plan. Of twenty-two employes of the Great Eastern Railway works ten received technical instruction at the Great Eastern Railway Mechanics' Institute, two at King's College, three at Finsbury Technical College, one at Sheffield Technical School, one at the Regent Street Polytechnic, two at the Crystal Palace School, and one each at University College, Birbeck Institute, and at the City and Guilds of London Central Institute.

Concerning the value of technical training to electrical engineers, Mr. Charles Meredith, who obtained his education at the Merchant Venturers' School and Bristol College, writes as follows :

I know that my training acquired at the Merchant Venturers' School and in the laboratory of Bristol College, has been of the greatest benefit to me in my trade, and has enabled me to win advancement to my present position of chief foreman of the shops.

A veneering of technical knowledge will not suffice to hide the defects of elementary education, says an intelligent surveyor ; or, in his own words, "No amount of technical education can fit a man for this business if he lacks education in the rudiments."

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